STATE OF CALIFORNIA

DEPARTMENT OF WATER RESOURCES

BULLETIN NO. 91-1

DATA ON WELLS IN THE WEST PART OF THE MIDDLE MOJAVE VALLEY AREA, SAN BERNARDINO COUNTY, CALIFORNIA

PREPARED BY

UNITED STATES DEPARTMENT OF INTERIOR
GEOLOGICAL SURVEY

FEDERAL-STATE
COOPERATIVE GROUND WATER INVESTIGATIONS

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This report is one of a series of open file reports prepared by the United States Department of Interior Geological Survey, Ground Water Branch, which present basic data on wells obtained from reconnaissance surveys of desert areas. These investigations are conducted by the Geological Survey under a cooperative agreement whereby funds are furnished equally by the United States and the State of California. The reports in this Bulletin No. 91 series are being published by the Department of Water Resources in order to make sufficient copies available for use of all interested agencies and the public at large.

Water Resources Division
Ground Water Branch
2929 Fulton Avenue
Sacramento 21, California

May 18, 1960

Mr. Harvey O. Banks, Director
California Department of Water Resources
P. O. Box 388
Sacramento 2, California

Dear Mr. Banks:

We have the pleasure to transmit herewith, for publication by the Department of Water Resources, U. S. Geological Survey report, "Data on Wells in the West Part of the Middle Mojave Valley Area, San Bernardino County, California," by R. W. Page, W. R. Moyle, Jr., and L. C. Dutcher. This investigation was conducted and the report prepared in accordance with the cooperative agreement between the State of California and the Geological Survey.

This report, one of a series for the Mojave Desert region prepared by the Long Beach subdistrict office, tabulates all available data on water wells in the west part of the Middle Mojave Valley area and shows reconnaissance geology with special reference to the water-yielding deposits.

Sincerely yours,

Harry D. Wilson, Jr.

Harry D. Wilson, Jr.
District Engineer

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PLATE

DATA ON WELLS IN THE WEST PART OF THE MIDDLE MOJAVE VALLEY AREA, SAN BERNARDINO COUNTY, CALIFORNIA

By R. W. Page, W. R. Moyle, Jr., and L. C. Dutcher

PURPOSE AND SCOPE OF THE WORK AND REPORT

The data presented in this report were collected by the U. S. Geological Survey as a phase of the investigation of water wells and general hydrologic conditions throughout much of the desert region of southern California. The study was made as a part of the cooperative program with the California Department of Water Resources.

The desert regions of California are characteristically regions of nearly barren mountain ranges and isolated hills surrounding broad valleys which are underlain by alluvial deposits derived from the surrounding highlands. The valley areas generally contain ground water having a wide range in chemical quality, which in many areas can be more fully developed for beneficial use.

The general objective of the cooperative investigation is to collect and to tabulate all available hydrologic data for the desert basins in order to provide public agencies and the general public with data for use in planning water-utilization and development works, and for use in subsequent ground-water investigations.

Accordingly, the scope of the work carried out by the Geological Survey in each area has included: (1) Visiting and examining most of the water wells in the area, determining and recording their locations in relation to geographic and cultural features and the public-land net, and recording well depths and sizes, types and capacities of pumping equipment, uses of the water, and other pertinent information; (2) measurements of the depth to the water surface below an established and described measuring point at or near the land surface; (3) selection of representative wells to be measured periodically in order to detect and record changes of water levels; and (4) collection and tabulation of well records, including well logs, water-level measurements, and chemical analyses.

The work has been carried on by the U. S. Department of the Interior, Geological Survey, under the general supervision of H. D. Wilson, Jr., District Engineer in charge of ground-water investigations in California, and under the direction of Fred Kunkel, Geologist in Charge of the Long Beach subdistrict office. The fieldwork was carried on by the authors, with the assistance of R. B. Bartlett and J. R. Cox, between October 1957 and September 1958 from the subdistrict office at Long Beach.

LOCATION AND GENERAL FEATURES OF THE AREA

The west part of the Middle Mojave Valley area described in this report (plate 1) covers about 470 square miles and in general includes parts of the Upper Mojave, Middle Mojave, and Harper Valleys (after Thompson, 1929, pls. 17 and 22). The principal communities in the area are Adelanto, Oro Grande, Helendale, and Beechers Corners.

The area is in the southwestern part of the Mojave Desert region between 117°10' and 117°40' west longitude and 34°30' and 35°00' north latitude. The southern boundary is coincident with the northern boundary of the Upper Mojave Valley area after Bader, Page, and Dutcher (1958). The northeastern boundary lies along the approximate location of the Helendale fault which trends generally northwestward. The northern boundary is the 35°00' north latitude line, which also is the southern boundary of the Harper Valley area (Kunkel, 1956). The western limit coincides with the boundary line between San Bernardino and Los Angeles Counties.

The area is shown on all or parts of the following U. S. Geological Survey topographic quadrangle maps: Adelanto, Helendale, Shadow Mountains, Victorville, and Victorville NW, at a scale of 1:24,000; Apple Valley, Hawes, Shadow Mountains, Victorville, and Kramer, at a scale of 1:62,500; and Barstow at a scale of 1:125,000.

Access to the area is provided by U. S. Highways 66, 395, and 466, as well as several other paved and many unpaved roads.

Topographically the area consists principally of broad alluvial fans and gently sloping alluvial plains that extend into the area from the northern slopes of the San Bernardino and San Gabriel Mountains. The Mojave River traverses the area from south to north in a well-defined channel cut below the surrounding alluvial plains and bedrock hills.

The Shadow Mountains and the Kramer Hills are the dominant topographic forms in the western part of the area. Quartzite and Silver Mountains and unnamed hills rise above the alluvial plain and border the area on the southeast. The mountains and hills consist mainly of granitic, metamorphic, and sedimentary rocks which are of little or no significance with respect to the water supply of the area.

PREVIOUS WORK AND ACKNOWLEDGMENTS

Data on ground water in the west part of the Middle Mojave Valley area are contained in several U. S. Geological Survey water-supply papers (table 3) and in reports by the California Department of Engineering (1918), California Department of Public Works (1934), California Department of Water Resources (1958), and unpublished data from the San Bernardino County Flood Control District and the U. S. Bureau of Reclamation.

The California Department of Water Resources and the San Bernardino County Flood Control District provided access to all pertinent information in their files, including numerous well logs, water-level records, and chemical analyses. The U. S. Bureau of Reclamation also provided water-level records and other miscellaneous data.

The geology as shown on plate 1 is by R. W. Page and W. R. Moyle, Jr., and is largely generalized after unpublished mapping by T. W. Dibblee, U. S. Geological Survey, Mineral Deposits Branch, in the Kramer and Hawes quadrangles, L. C. Dutcher in the Shadow Mountains, Victorville, and Hawes quadrangles, and in part after Bowen (1954).

Plate 1. Map of the west part of the Middle Mojave Valley area, California, showing reconnaissance geology and locations of wells.

The cooperation and assistance given by the many ranchers, well owners, drillers, and public agencies contributed materially to the completeness of the data presented in this report and are most gratefully acknowledged.

GEOLOGIC AND HYDROLOGIC FEATURES OF THE AREA

The geologic units in the west part of the Middle Mojave Valley area can be grouped into two broad categories; consolidated rocks and unconsolidated deposits. The consolidated rocks are for the most part impervious and, except for minor amounts of water in cracks and weathered zones, yield little or no water. The consolidated rocks (pl. 1) comprise the old crystalline, metamorphic, and consolidated sedimentary rocks of pre-Tertiary age which collectively form the basement complex and the consolidated sedimentary rocks of Tertiary age.

The consolidated sedimentary and pyroclastic rocks of Tertiary age are parts of the Ricardo formation of Pliocene age in the Kramer quadrangle (Dibblee, unpublished) and the Tropico group of Miocene(?) and Pliocene(?) age, which was mapped by Dibblee (1958) in the Castle Butte quadrangle. They consist mainly of gray and red conglomerate, arkose, cobble gravel, tuff, sandstone, chert, limestone, gravel, sand, silt, and clay. For the most part these rocks are poorly permeable, but locally where penetrated by deep wells they yield small amounts of water to domestic wells.

Volcanic rocks of acidic composition, mainly andesite, rhyolite, quartz basalt, and dacite of Miocene(?) and Pliocene age, also occur in the west part of the Middle Mojave Valley area. These rocks also are part of the Ricardo formation and the Tropico group.

Extrusive and intrusive basalts of Miocene(?) and Pliocene(?) age also occur in the area. These rocks are part of the Tropico group.

The unconsolidated older alluvium of late Pleistocene age consists of compact arkosic gravel, sand, silt, and clay. The deposits are weathered, and locally the feldspars have been altered to clay. Near the hills the unit is predominantly gravel but beneath the valley areas it is finer grained and better sorted. Because the older alluvium overlies the basement complex, older fan deposits, or Tertiary continental rocks on which an erosional surface of considerabl local relief is present, the thickness of the older alluvium varies greatly from place to place. Where saturated the older alluvium yields moderate quantities of water to wells.

The older fan deposits of Pleistocene age consist of slightly consolidated fanglomerate or unsorted, unbedded boulder gravel occurring as isolated erosional remnants. The materials are mainly from a granitic source but fragments of basalt, andesite, dacite, and metamorphic rocks are common. The unit is nearly everywhere above the water level in wells and is unsaturated. However, the attitude of this unit suggests that locally it may extend beneath the younger or older alluvium in the valley and where saturated may yield small quantities of water to deep wells.

Old lake deposits of late Pleistocene age are locally interbedded with the older alluvium or the older fan deposits. These deposits are silt, clay, fresh-water limestone, and lime-cemented gravel, sand, and silt.

The river alluvium of Recent age underlies the flood plain of the Mojave River and is composed mainly of fine gravel and sand. Where saturated it yields water freely to wells. The river alluvium beneath the Mojave River, where most of the wells are drilled to shallow depths, is the principal water-bearing unit in the area. However, beneath much of the area west of the river, where the depth to water is greater and where the younger alluvium is absent and the younger fan deposits are unsaturated, the wells yield water derived from the older alluvium.

The river-channel deposits beneath the active channel of the Mojave River consist mainly of highly permeable sand which permits a large seepage loss to the main water body whenever runoff occurs.

The younger fan deposits of Recent age are mostly poorly sorted boulders, arkosic gravel, sand, silt, and clay derived from nearby hills or mountains. The materials have been transported only a short distance and mainly represent mudflow or slope-wash debris. Near the hills and mountains the younger fan deposits are coarse grained, but they become finer with increasing distance from the areas of active erosion. These deposits are poorly sorted and poorly permeable, are usually above the water table, and are believed to be unpromising sources of water.

Playa deposits of Recent age occur principally at the base level of some minor drainage areas. They consist principally of silt and clay and minor amounts of sand, are of low permeability, and where saturated usually contain water having a moderate to very high content of dissolved solids.

Unconsolidated coarse to fine dune sand occurs in the northwest part of the area. The dunes, in part at least, are actively drifting; locally some small interdune playas are included in the area shown as dune sand on plate 1.

In 1958 the water levels in wells ranged from near land surface beneath much of the land near the river to more than 200 feet below the surface of the higher parts of the alluvial fans and plains. The movement of ground water through the older alluvial deposits is complicated by several ground-water barriers in the area which are presumed to be major faults. Ground-water recharge to the area is from deep penetration of rain, percolation of surface water from the Mojave River, and subsurface ground-water flow from the Upper Mojave Valley area of Bader, Page, and Dutcher (1958).

Deep penetration of rain is minor, but during infrequent wet years probably occurs over the entire area. In the area west of the river and approximately north from the latitude of Bryman junction deep penetration of rain and local storm runoff probably are the principal sources of ground-water recharge. Subsurface ground-water flow from the Upper Mojave Valley area is the principal source of recharge to the area west of the river southward from Bryman junction. Numerous springs issue from the bluffs along the west side of the river near Oro Grande.

The Helendale fault (pl. 1) strikes across the Mojave River north of Helendale but does not appear to be a barrier to the movement of the ground water in the river alluvium. Ground-water movement in the river alluvium is downstream generally parallel to the river. In the area near Adelanto the ground-water movement is northeastward toward the river but in the several subbasins separated by barriers in the north and northwest parts of the area ground-water movement is southeastward or eastward toward the river.

About 625 wells were canvassed in the west part of the Middle Mojave Valley area during the investigation. A few of these wells are not shown on plate 1 and table 1 because they were either dry or destroyed at the time of the field canvass and little or no information is available for them.

DESCRIPTION OF TABLES

The tables in this report contain or refer to all known data, published and unpublished, for wells in the west part of the Middle Mojave Valley area.

In table 1 all wells canvassed for which data are available are listed according to township, range, and section. (See well-numbering system, p. 16.)

In table 2 cross indexes are given for numbers previously assigned to wells by others and well numbers assigned by the Geological Survey.

Table 3 lists publications or reports which contain water-level measurements made in wells in the area.

In table 4 the wells are listed for which periodic water-level measurements are available.

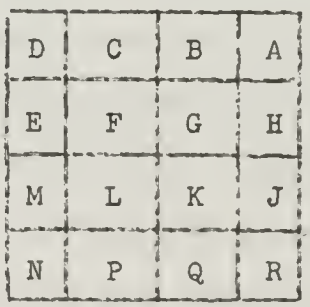
Table 5 contains all available unpublished records of water levels in wells. Also, the complete records of water-level measurements are given for wells 6/5-14M1, 29J2, 34E1, 7/4-30C1, 7/5-22R1, 8/4-20N1, and 31R1. These are key wells which indicate ground-water conditions in various parts of the area.

Table 6 contains drillers' logs of wells and table 7 contains chemical analyses of water from wells.

WELL-NUMBERING SYSTEM

The well-numbering system used in the west part of the Middle Mojave Valley area is that used by the Geological Survey in California since 1940. It has been adopted by the California Department of Water Resources and by the California Water Pollution Control Board for use throughout the state.

Wells are assigned numbers according to their locations in the rectangular system for the subdivision of public land. For example, in the number 7/4-6D1, which was assigned to the irrigation well of Norman Goss, the part of the number preceding the slash indicates the township (T. 7 N.), the part between the slash and the hyphen is the range (R. 4 W.), the number between the hyphen and the letter indicates the section (sec. 6), and the letter indicates the 40-acre subdivision of the section as shown in the accompanying diagram.



Within the 40-acre tract wells are numbered serially as indicated by the final digit. Thus, well 7/4-6D1 is the first well to be listed in the $NW\frac{1}{4}NW\frac{1}{4}$ sec. 6. Because the area lies entirely in the northwest quadrant of the San Bernardino base and meridian lines the foregoing abbreviation of township and range numbers is sufficient.

For the well numbers where a dash has been substituted for the letter designating the 40-acre tract the dash indicates that the well is plotted from unverified location descriptions; the indicated sites of such wells were visited but no evidence of a well could be found.

Exceptions to the system of numbering wells, according to their position in the 40-acre subdivision of the section, are to be found. In those instances where the wells have been found to be located inaccurately, they have been correctly plotted on the map but the original number assigned has been retained. This has been done to avoid confusion in the numbering system and to prevent the necessity for number changes in reports already published. Fortunately these mislocated wells are few in number and were seldom misplaced any farther than one of the adjoining 40-acre subdivisions.

REFERENCES

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Thompson, D. G., 1929, The Mohave Desert region, Calif.: U. S. Geol. Survey Water-Supply Paper 578, p. 266-279, 371-436.

United States Geological Survey, 1940, Water levels and artesian pressure in observation wells in the United States: Water-Supply Paper 886.

United States Geological Survey, 1941-57, Water levels and artesian pressure(s) in observation wells in the United States, part 6, Southwestern United States: Water-Supply Papers 911, 941, 949, 991, 1021, 1028, 1076, 1101, 1131, 1161, 1170, 1196, 1226, 1270, 1326, 1409.

Table 1.--Description of wells in the west part of the Middle Mojave Valley area, San Bernardino County, Calif.

USGS number: The number given is the Geological Survey number assigned to the well according to the system described in the section on the well-numbering system.

Source of data and other numbers: The source of data on each line is indicated by the following symbols: BLM U. S. Bureau of Land Management, BR from unpublished U. S. Bureau of Reclamation records at Boulder City, Nev., CDE California Department of Engineering (1918) and also republished in Thompson (1929), DFC-1 Dickey, D. D., 1957, U. S. Geol. Survey Bull. 1045B, 16 p., DGT from Thompson (1929), F from the San Bernardino County Flood Control District, GS observations and measurements made by the Geological Survey or reported by owners, drillers, or others, M from California Department of Public Works (1934), or from Geological Survey water-supply papers given in table 3, R Atchison, Topeka, and Santa Fe Railway, SFC-1 Benda, W. K., Erd, R. C., and Smith, W. C., 1957, U. S. Geol. Survey mimeographed report, 132 p. A number following the letters is the well number used in the report, or by the agency, and is given only where different from the Geological Survey number.

Date of observation: Data for each well are presented in reverse chronological order, with the most recent information summarized on the top line, opposite the well number. Where only the year is shown, no date was given in the source reference but the information is assumed to be contemporaneous with other dated information from the same source.

Owner or user: The name given is the owner or user of the well on the date indicated. If more than one set of data are given for a well the name is not repeated unless it is known to be different.

Year completed: The completion date was obtained from the driller's log or reported by the owner or others.

Depth: Depths of wells given in whole feet were reported by owners, drillers, or others; depths given in feet and tenths were measured below land-surface datum by the Geological Survey.

Type of well and diameter: Type of well construction is indicated by the following symbols: A auger, C cable-tool, D dug, Dc dug and cable-tool, Dr drilled, R rotary. G indicates the well is gravel packed. The number following the letter is the diameter of the casing or pit in inches.

Pump type and power: The type of pump or method of lift is indicated by the following symbols: A airlift, C centrifugal, J jet, L lift, N none, S submersible turbine, T turbine. The type of power is indicated as follows: D diesel engine, E electric motor of undetermined horsepower (where a number appears in this column it indicates the rated horsepower of an electric motor), G gasoline engine, H hand operated, N none, W windmill.

Yield: The yield or output of the pump in gallons per minute is usually based on tests performed by the California Electric Power Co. and reported by the well owners or drillers, and is not necessarily the maximum capacity of the well or installed pump.

Specific capacity: The specific capacity of a well is its rate of yield per unit of drawdown of the water level in the well. It is determined by dividing the figure in the Yield column by the drawdown resulting from sustained pumping at that rate; the result is expressed in terms of gallons per minute per foot of drawdown. The yield and drawdown data are principally from tests performed by the California Electric Power Co. and reported by well owners and drillers.

Use: Dm domestic, Ds destroyed or dry, Ir irrigation, In industrial, Ps public supply, S stock, T test for oil or boron, Un unused.

Measuring point: The point from which water-level measurements by the Geological Survey are made is described as follows:

Bhc bottom of hole in casing	Ls land surface	Tcr top of curb
Bpb bottom edge of pump base	Tap top of access pipe	Tf top of floor
Hcc hole in casing cover	Tbc top of board cover	Thc top of hole in casing
Hpb hole in pump base	Tc top of casing	Tp top of pit
Na no access	Tcb top of concrete bricks	Tpb top of pump base
Ncp notch in concrete pipe	Tcc top of casing cover	Tsl top of steel ladder

The suffix letters N, S, E, W, indicate the side, north, south, east, or west, from which the measurement is made. The distance of the measuring point above or below(-) land-surface datum is given in feet and tenths and sometimes hundredths. All measurements of water level are from the same measuring point unless otherwise indicated; however, the measuring points used by the California Electric Power Co., drillers, California Department of Engineering (1918), and others are not known.

Altitude: The altitude given is the altitude of land-surface datum, the plane of reference, at the well. Altitudes given to the nearest foot were interpolated from Geological Survey topographic maps having 10-, 20-, 25-, or 40-foot contour intervals. Altitudes given to the nearest tenth of a foot were determined by spirit leveling by the California Department of Engineering (1918) or the U. S. Bureau of Reclamation.

Water level: Measured depths to water level are given in feet, tenths, and hundredths, or feet and tenths; reported or approximate depths to water level are given in whole feet. The water-level measurements given by the Geological Survey for 1957 and 1958 are below land-surface datum, and the distance between the measuring point and land-surface datum has been subtracted from or added to the measured water level below or above the measuring point; the measurement given is the depth to water below land-surface datum. For CDE (California Department of Engineering, 1918) and DGT (Thompson, 1929) numbers the measurements are given as tabulated in the reference, and, as tabulated, are depth to water below ground surface, which probably is the same as land-surface datum of this report. For M numbers (from the reference given in table 2, part 2) the depths to water level given are below ground surface, which probably is the same as land-surface datum of this report.

Other data: C chemical analysis of water is given in table 7, L driller's log of well is given in table 6, W unpublished records and selected published records of water levels are given in table 5, Wp records of water levels are in the references given in table 3.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Specific capacity	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 4 W.												
6/4-6C1	GS	10-2-57	J. Villareal	1957	145	C 8	J 1			Dm	Na		2,630	98	L
6D1	GS	10-2-57	Rongnie Newton	1949	86	6				Dm			2,590	(a)	
6D2	GS	10-2-57	Henery Shelton	1948	175	C 10	J 1½			Dm	Na		2,600		
6D3	GS	10-2-57	J. C. Dunkley	1948	131	C 10	S 1½			Dm	Tcc	0.5	2,600	b77	
6D4	GS	10-2-57	F. J. Boone	1948	90	C 10	J 1			Dm	Na		2,600		
6D5	GS	10-2-57	E. D. Love	1947	90	C 6	S 1			Dm	Hpb	1.0	2,600	77.30	
6D6	GS	10-2-57	J. P. Blankenship	1955	129	C 8	S 3/4			Dm	Tc	1.0	2,600	80.45	L
6D7	GS	10-2-57	Earl Corrales		115	8	J ½			Dm	Tc	1.0	2,600	c79.06	
6D8	GS	10-2-57	J. Villareal		86	6	N N			Un	TcW	1.0	2,600	83.07	
6D9	GS	10-2-57	F. New		185	6	J 3			Dm	Na		2,600		
6D10	GS	10-2-57	Wayne Murry	1947	115	8	L W			Dm	TbcE	1.0	2,580	d51.18	L
6D11	GS	10-3-57	Lloyd Payne		30.0	6	N N			Un	TcW	2.0	2,560	18.37	
6D12	GS	10-3-57	Lloyd Payne		27.9	6	N N			Un	TcN	1.5	2,560	18.32	

6E1	GS	10-1-57	R. L. Denny	1954	100	C	8	J 3/4	Dm	TcW	1.0	2,590	61.98	
6E2	GS	10-1-57	Minnie Couse	1954	96	C	8	S 3/4	Dm	TcW	1.0	2,590	d66.33	
6E3	GS	10-1-57	C. L. Langley				4	J ½	Dm	ThcN	0	2,600	d63.99	
6E4	GS	10-1-57	H. H. White	1947	265	RG	6	J 1	Dm	Na		2,620		L
6E5	GS	10-2-57	Jergen Forseng	1953	103	C	8	J 1	Dm			2,610	(e)	
6E6	GS	11-7-58	R. D. Workman	1947	104	RG	6	N N	Un	TcW	1.0	2,580	44.53	L
6E7	GS	10-3-57	Della Burge	1925	58	Dc	48	J ½	Dm	TbcE	1.0	2,580	40.19	
6E8	GS	10-3-57	Della Burge	1950	97	C	8	J 1½	Dm	Thc	.5	2,580	42.08	
6E9	GS	10-3-57	Jack Williams					N N	Ds			2,560	dry	Wp
	M-5	9-7-32	W. C. Buckbee				7		Dm	Tc	.6		22.1	
	CDE-302	1917	W. H. Robinson		41	D		L					35.0	
6E10	GS	10-2-57	R. E. Mitchell	1953		C	8	L W	Dm	ThcE	.5	2,580	d42.32	
6E11	GS	10-3-57	Dewey Cook	1947	65	C	6	J 1	Dm	Na		2,580		
6M1	GS	10-1-57	Davis		98.1		8	N N	Un	TcW	1.0	2,630	94.35	
6N1	GS	10-1-57	J. S. Stirens					J 1	Dm	Na		2,580		
6N2	GS	10-1-57	Leland Roberts				8	J 3/4	Dm	TcE	-7.0	2,590	31.21	
6N3	GS	10-1-57			107.2		11	N N	Un	TcS	3.5	2,600	39.96	

a. Well in locked enclosure.
b. Tape smeared.
c. Pumped recently
d. Pumping.
e. Obstruction in well above water level.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)	Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 4 W.--Continued											
6/4-6N4	GS	10-1-57	Leland Roberts		51.0	12	N N			Un	TcE 1.0	2,590	25.13	
6N5	GS	10-1-57	Leland Roberts		47.3	8	N N			Un	TcS -3.5	2,590	26.31	
6P1	GS	10-1-57	W. G. Smith			9	L 2			Dm	TpbS 1.0	2,590	32.54	
6P2	GS	10-1-57	G. A. Allison		54	5	J 1			Dm	Na	2,590		
7C1	GS	10-1-57	W. B. Smith	1952	78	C 8	T 5			Dm	BhcS 2.0	2,590	b26.55	
7D1	GS	10-1-57	W. B. Smith	1948		C	T 2			Ir		2,590	(e)	
7D2	GS	10-1-57	J. B. Quimm		22	6	C ½			Dm	TapW 0	2,580	17.94	
7D3	GS	10-1-57	Vivian Twist(former)			6	C 1			Dm	TcN 0	2,590	29.49	
7E1	GS	9-30-57	E. T. Hoffman	1948	40	C 8	J ½			Dm	TcW -.5	2,590	24.12	
7E2	GS	9-30-57	Daniel Gonzales	1946	50	C 6	N N			Ds		2,600		
7E3	GS	9-30-57	Daniel Gonzales	1952	38	13	J ½			Dm	TapS 1.5	2,590	16.82	
7E4	GS	10-1-57	A. G. Collings	1950		33	C ¼			Dm	TbcS 1.0	2,590	17.53	
7E5	GS	10-2-57	L. H. Leachman			RG 14	T 10			Ir	ThcE .5	2,580	15.88	

7F1	GS	10-1-57	George Antic		265		8	J	1	Dm	TcS	0	2,590	30.15	
7F2	GS	10-1-57	W. B. Smith	1950	48	C	6	L	W	Dm	Na		2,600		
7M1	GS	9-27-57	L. C. Stetler	1948	43.5	RG	12	C	7	Dm	TpE	0	2,590	18.79	
7M2	GS	9-30-57	Norberto Carlos		60		6	L	H	Dm	TcW	1.5	2,600	25.20	
7M3	GS	9-30-57	L. M. Griggs	1954	95	RG	8	J	1	Dm	TcE	.5	2,600	c38.79	
7M4	GS	9-30-57	J. R. Hook	1955		C	10	J	½	Dm	Na		2,590		
7N1	GS	9-27-57	L. C. Stetler	1952	28	C	8	J	¼	Dm	TcN	0	2,600	16.89	
7N2	GS	10-3-57	L. C. Stetler				8	N	N	Ds			2,600	dry	Wp
	M-4	9-9-32	Arrowhead Lake Co.							Dm	Tbc	1.3		21.1	
11L1	GS	9-6-57	S.W. Portland Cement Co., well 16	1945	51.8		9½	N	N	Un	TcS	1.0	3,475	2.14	
13K1	GS	8-30-57			91.7	D	36	N	N	Ds			3,060	dry	
18C1	GS	9-30-57	Triangle Rock Prod.	1955		C	14	T	1½	In	Hcc	.5	2,620	34.90	
18E1	GS	9-27-57	Triangle Rock Prod.	1954			14	T	125	In	BhcS	1.0	2,600	7.55	
18F1	GS	9-24-57	J. G. Ivy	1944	40		12	C	5	Ir	TcS	-7.0	2,610	d17.47	
18F2	GS	9-24-57	J. G. Ivy	1950	120	RG	6	J	1	Dm	TcW	4.5	2,610	c15.41	L
18F3	GS	9-26-57	Riverside Cement Co.	1950			12	T	7½	Dm	HpbN	1.0	2,620	16.63	

b. Tape smeared.
c. Pumped recently.
d. Pumping.
e. Obstruction in well above water level.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 4 W.--Continued												
6/4-18F4	GS	9-26-57	Riverside Cement Co.		23.0	D 60	N			Un	Tbc	1.0	2,620	16.93	
18F5	GS	9-27-57	Riverside Cement Co., well 1		47	12	T 10?			Dm	Hpb	1.5	2,603.6	21.90	
18F6	GS	9-27-57	S. R. Dulaney			8	T 1½			Dm	TcW	.5	2,610	b16.2	
18L1	GS	9-20-57	R. H. Loomis	1952	140	10	T 3			Dm	TcS	.5	2,600	c17.70	
18L2	GS	9-26-57	Riverside Cement Co., well 9	1943	62	14	C 3			Dm	TcN	-13.0	2,610	b22.67	
18L3	GS	9-25-57	Riverside Cement Co.	1948	85	14	T 40			Ir	Na		2,610		
18P1	GS	9-25-57	Riverside Cement Co., 53-1	1953	78	CG 14	T 25	1100	38	In	Tap	3.0	2,610	d27.52	L
18P2	GS	9-26-57	Riverside Cement Co., 52-1	1952	77	CG 14	T 25	1500	88	In	TapN	2.5	2,610	f17.32	L
18P3	GS	9-26-57	Riverside Cement Co., well 2	1911	296	16	N N			Un	TccW	-2.5	2,610	f17.84	
	CDE-274		Victor Cement Co.		125	Dr 16	C	1620							
18P4	GS	9-26-57	Victor Cement Co.			16	N N				Na		2,610		
	CDE-275				270	16	C	1620							
18Q1	GS	9-20-57	Lillian Enos			10	J ½			Dm	TcS	.5	2,650	c48.06	

18Q2	GS	9-27-57	Riverside Cement Co., well 2		58		T	7½			Ir	TapW	.5	2,650	d47.77	
18-1 CDE-273	GS	9-26-57	Victor Cement Co.		260	Dr	12	C			Ds			2,620		
19A1	GS	9-24-57	A. Lara	1918	57.5	D	30	N	N		Un	Tcc	1.5	2,660	55.24	
19A2	GS	9-27-57	Riverside Cement Co., 52-2	1952	121	CG	12	T	10	103	Dm	TcS	.5	2,650	45.15	L
19A3	GS	9-27-57	Oro Grande Grammar School	1951	114		10	T	7½	285	Ps	HpbN	.5	2,670	(b)	L
19B1	GS	9-19-57	Alton Crow			C		C	½		Dm	Na		2,620		
19B2	GS	9-19-57	T. H. Wobermin	1956	220	C	8	T	5	20	Dm	TcS	.5	2,630	d132.06	L
19B3	GS	9-18-57	Ben Haney		13		12	N	N		Un	TcE	-.5	2,620	12.70	
19B4	GS	9-19-57	W. W. Wood		30		8	J	1½		Dm	TcS	.5	2,620	d23.99	
19B5	GS	9-19-57	C. O. Langley		23	D	36	J	½		Dm			2,630	(a)	
19B6	GS	9-19-57	H. L. Morrow	1956	30	C	8	J	1/3		Dm	Na		2,620	20	
19B7	GS	9-19-57	Martin Gonzales	1920	40	D	8	C	N		Un	Na		2,620		
19B8	GS	9-20-57	Ardell Hillwig		59.0	Dc	6	N	N		Un	Tap	-10.0	2,620	25.85	
19C1	GS	9-19-57	Charles Leighty	1949	42		6	J	½		Dm	Na		2,620		
19C2	GS	9-19-57	I. M. Whitehouse				8	J	1		Un	TcE	-3.5	2,620	13.81	
19C3	GS	9-19-57	J. A. Dershem	1946	40	C	6	J	½		Dm	TcE	.5	2,620	14.20	

a. Well in locked enclosure.
b. Tape smeared.
c. Pumped recently.
d. Pumping.
f. Nearby well pumping.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 4 W.--Continued												
6/4-19C4	GS	9-19-57	Emmett Pethoud	1956	48	C 8	C 2			Dm	TcS	1.0	2,620	c13.75	
19C5	GS	9-19-57	H. H. DeWitt	1948	21		C ½			Dm	Na		2,610		
19C6	GS	9-19-57	H. H. DeWitt	1951	47	C 12	C 3			Ir	TccW	-3.0	2,610	13.33	
19E1	GS	9-25-57	Riverside Cement Co., 54-4	1954	100	CG 16	S 60	1500	68	In	Na		2,613		L
19F1	GS	9-26-57	Riverside Cement Co., 54-1	1954	100	CG 16	T 25	600	22	Ir	Hpb	4.5	2,619	13.75	C,L
19H1	GS	9-18-57	H. H. Ley	1955	41	CG 14	J 1	800	61	Dm	Tcc	.5	2,640	23.61	L
19H2	GS	9-19-57	H. H. Ley	1943	29	C 10	C 2			Ir	Tc	.5	2,630	10.02	
19J1	GS	9-19-57	H. S. Osborne	1956	59	C 10	J 1			Dm	Na		2,640	32	
19J2	GS	9-19-57	A. V. White	1953	70	RG 8	C 1			Dm	Na		2,640		C
19J3	GS	10-2-57	N. F. Tower	1957		C 8				Dm	TcS	.5	2,680	61.01	
19P1	GS	9-26-57	Riverside Cement Co., well 54-5	1954	100	CG 16	T 25	840	27	Ir	Hpb	4.5	2,622	7.31	C,L
19R1	GS	9-18-57	E. M. Clanton	1949	45	RG 8	C 1			Ir	TcW	1.0	2,640	21.02	

19R2	GS	9-18-57	Hain Johnston	1951	45	R	8	J	3			Dm	Na		2,640		
19R3	GS	9-18-57	Donald Whittier	1947	55	RG	12	T	15	630	45	Ir	BhcW	0	2,640	d34.18	C
19R4	GS	9-18-57	Donald Whittier		48		12	J	1			Dm	Thc	0	2,655	33.66	C
19-1	M-3 F-19G1	1-10-34	John Bennette										Tcr	2.5	2,620	16.1	Wp Wp
20M1	GS	9-24-57	T. J. McLaughlin	1955	80	R	2	J	1/3			Dm	Na		2,680		
20M2	GS	9-24-57	T. J. McLaughlin	1947	0	RG	6	N	N			Ds			2,680	dry	L
20M3	GS	9-24-57	J. A. Williams	1949	76	C	6	L	W			Dm	Tc	1.0	2,690	74.84	L
20M4	GS	9-24-57	Aurelio Savedra	1955	85	R	2	J	½			Dm	Na		2,690		
20M5	GS	9-24-57	P. P. Gerber	1913			12	J	3/4			Dm	Na		2,690		
20M6	GS	9-24-57	Veoda Gerber	1955	77	RG	2	N	N			Un			2,690	(e)	
20M7	GS	9-24-57	B. Cuddy and H. McKeen	1947	112	C	6	J	1			Dm	Tc	.5	2,710	95.36	L
24J1	GS BR	8-30-57 10-27-50	G. N. Barrow		190	C	8	J	½			Dm	Tap	1.2	2,930	153.95 153.4	C
24J2	GS GS	9- 5-57 9- 1-55	J. Osborne	1955	212	R	10	N	N			Un	TcE	.5	2,930	160.26 160.21	
26B1	GS GS	8-30-57 9- 2-55	Fanny P. Foster				8	L L	N G			Un Dm	TcE	0	2,870	191.14 190.20	C

c. Pumped recently.
d. Pumping.
e. Obstruction in well above water level.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 4 W.--Continued												
6/4-26R1	GS	8-30-57	Victor Lime Rock Co.			12	L 1			In	TcW	0.5	2,980	186.38	
27-1	DGT-341	2-19-18	E. C. Mann		85	D				Ds			2,800	dry	
27-2	DGT-342	2-19-18			81	Dr 12				Ds			2,795	dry	
29M1	GS	9-18-57	T. C. Knight	1947	33	C 8	J 1/3			Dm	TcN	.5	2,660	17.46	
29M2	GS	9-17-57	T. C. Knight	1943	30	C 24	N N			Un			2,660	(e)	
29M3	GS	9-18-57	T. C. Knight	1932	54	C 12	C N			Un	TapE	1.0	2,650	7.06	
29M4	GS	9-18-57	Lois E. Roehrig			10	C 3			Dm	TcN	1.0	2,660	10.95	C
29M5	GS	9-18-57	Bubert Knight			10	J 1			Dm	Tc	.5	2,660	12.05	
29M6	GS	9-25-57	Riverside Cement Co., 54-2	1954	74	CG 16	S 75	1550	81	In	Na		2,647	11	C,L
29M7	GS	9-25-57	Riverside Cement Co., 54-3	1954	53	CG 16	S 30	600	26	In	Na		2,649	10	C,L
29N1	GS	9-10-57	Wayne Sanders				C E			Dm	Na		2,660		
29N2	GS	9-10-57	B. W. Corbin	1954	45	RG 8	L 1/3			Dm	TcE	.5	2,660	16.41	
29N3	GS	9-10-57	W. Lewis	1933	39	C 14	C 5			Ir	TcN	0	2,660	17.22	

29N4	GS	9-10-57	C. M. Corbin	1936	40	Dc	8	C	5			Un	TcE	-11.3	2,660	16.71	
29N5	GS	9-10-57	Hook									Dm			2,660	(a)	
29-1	M-1	9- 7-32	Berger Serv. Sta.			D							Tcr	0	2,660	8.0	Wp
29-2	GS	9- 4-41	Victorville Military Airport, well 1	1941	100	CG	16	N	N	1000	48				2,750	12	L
29-3	GS	7-30-42	Victorville Military Airport, well 3	1942	100	CG	16	N	N	1000	83	Ds			2,660	14	L
30A1	GS	9-18-57	E. M. Clanton	1949	46	RG	8	J	3			Dm	TcW	.5	2,650	22.52	
30C1	GS	9-17-57	E. D. Martin		50		12	T				Ir	Na		2,630		C
30C2	GS	9-17-57	Harris				14	T	G			Un	ThcW	.5	2,630	11.52	
30D1	GS	9-17-57	Richard Weening	1945	35		12	C	15	450		Ir	TcW	-4.5	2,640	d16.5	
30D2	GS	9-17-57	N. D. Shutt	1949	40		6	J	¼			Dm			2,640	(e)	C
30D3	GS	9-18-57	Harris		115		8	L	W			Dm	TcE	.5	2,730	d105.96	
30D4	GS	9-17-57	E. D. Martin	1952	20		8	J	1			Dm	TcN	.5	2,640	d11.89	C
30D5	GS	9-17-57	E. D. Martin			Dc	14	N	N			Ds			2,640		Wp
	M-105	9-17-30	Jones									Dm	Tpb	2.4		12.1	
30E1	GS	9-17-57	R. H. Fowler		23		6	C	¼			Un	Na		2,650		
30E2	GS	9-17-57	Ethel Garrison	1947	71	RG	8	T	2			Dm	TcW	2.0	2,640	7.88	

a. Well in locked enclosure.
d. Pumping.
e. Obstruction in well above water level.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 4 W.--Continued												
6/4-30G1	GS	2-25-58	George Air Force Base, well 5		100	R 16	S 30	1000		Ps			2,650	(a)	C,L
30K1	GS	2-25-58	George AFB, 3		105	C 16	T 25	1000		Ps	Na		2,650		C
30K2	GS	2-25-58	George AFB, 4	1943	98	R 16	T 25	1000		Ps	Na		2,650		C,L
30N1	GS	9-17-57	Victor Valley Country Club	1955		12	C 3			Dm	TcE	1.0	2,710	c21.07	
30P1	GS	9-17-57	Flora Brown	1956	37	C 8	C ¼			Dm	TcE	.5	2,670	c9.24	
30P2	GS GS	2-25-58 9-17-57	Adelanto Comm. Serv. Distr.		43.8	16	N N	400	13	Un	TcN	.5	2,650	12.07 13.83	C,L
30-1	M-2	11-15-32	Adelanto Comm. Serv. Distr.			16	N N			D:	Tc	3.0	2,650	8.7	Wp
30-2	GS	7-18-42	Victorville Military Airport, well 2	1942	100	CG 26	N N			x			2,645	12	L
31J1	GS	9- 9-57	G. C. Boyer			9	L G			Dm	TcE	.5	2,790	74.22	
31R1	GS	9- 6-57	Frank Kling	1950			J 1			Dm			2,790	(a)	
32B1	GS	9-10-57	R.W., R. B. Drahos	1956	97	8	J ½			Dm	Na		2,760		
32D1	GS	9-11-57	H. M. Carling			8	J E			Dm	TcW	0	2,740	55.23	

32D2	GS	9-11-57	Ann Poindexter		25				Dm			2,700	(a)		
32D3	GS	9-11-57	Vance Newman	1951	79	C	8	T 1½	25	Dm	TcS	.5	2,710	c23.29	
32D4	GS	9-11-57	H. M. Spencer	1954	80	RG	8	J 1		Dm	Bhc	.5	2,710	33.07	
32D5	GS	9-11-57	B. Hernandez	1946	30	Dc	36	J ¼		Dm			2,700	(e)	
32D6	GS	9-11-57	G. R. Seals	1932	20.0	D	60	T 1		Un	Tcr	.5	2,710	18.07	
32D7	GS	9-12-57	G. R. Seals	1943	54	CG	8	T 3		Ir	TcN	0	2,690	15.8	
32D8	GS	9-12-57	G. L. Sanders		78		8	J 1½		Dm	Na		2,730		C
32D9	GS	9-12-57	E. G. Paulson				6	J ½		Dm	TcS	1.5	2,740	d43.17	
32D10	GS	9-12-57	E. G. Paulson				8	J 1		Dm	Na		2,740		
32D11	GS	9-12-57	E. B. Buck	1947	105		8	J 1½		Dm	Na		2,750		
32D12	GS	9-12-57	R. E. Perkinson		150		8	J 1		Dm	TcE	1.0	2,760	57.42	
32D13	GS	9-12-57	Joseph Veaders				10	J ½		Dm	TcW	.5	2,750	50.26	
32D14	GS	9-10-57	C. M. Corbin	1936	36	C	8	L W		Un	TapS	.5	2,670	18.95	
32G1	GS	9-11-57	Donald Doran	1955	68	C	10	L ½		Dm	Tcc	.5	2,750	d52.17	L
32G2	GS	9-10-57	Donald Doran	1956	105	C	10	L 3/4		Dm	Na		2,760	56	L
32G3	GS	9-10-57	R. H. Clark				12	T 3		Dm			2,755	(e)	C
32G4	GS	9-10-57	R. H. Clark				8	T 1		Dm	BhcE	1.0	2,750	48.31	C

a. Well in locked enclosure.
c. Pumped recently.
d. Pumping.
e. Obstruction in well above water level.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 4 W.--Continued												
6/4-32G5	GS	9-10-57	Mary Downing	1942	100		J 1			Dm			2,750	(b)	
32G6	GS	9-10-57	Mary Downing		100		T 1½			Dm	Na		2,760		
32G7	GS GS	9- 9-57 8- -56	Andrew Greba		55	C 6	J ¼			Dm	Na		2,740	44	
32J1	GS	9- 4-57	R. L. Holland Cafe			6	J 1			Dm			2,710	(b)	
32J2	GS	9- 5-57	A. H. Sullivan	1948	65	C 10	J 1			Dm	TcE	1.0	2,710	37.69	
32J3	GS	9- 5-57	E. Barbee	1920	110	C 8	S 1	13		Dm				85	
32J4	GS	9- 5-57	E. Barbee	1957	115	C 8	S 3/4			Dm			2,760	65	
32J5	GS	9- 5-57	J. H. Long		27.9	14	N N			Ds			2,760		
32J6	GS	9- 5-57	Driskie				J 1			Dm	Na		2,740		
32J7	GS	9- 5-57	City of Los Angeles, well 1		85		T 1			Un	TcE	1.0	2,740	f75.80	
32J8	GS	9- 5-57	City of Los Angeles, 2		90		T 1			Dm			2,740		
32J9	GS	9- 5-57	City of Los Angeles, 3		185		T 3			Dm			2,740		

32K1	GS	9- 5-57	E. Barbee	1955	170	RG	10	S	½			Dm			2,820	110	
32N1	GS	4-11-57	Riverside Cement Co.,well 52-5	1952	193	CG	10	T	5	35	.4	Dm	BhcS	1.0	2,765	52.91	L
32N2	GS	9- 5-57	R. R. Hamersly		158	D	7	J	1½			Dm	Na			51	
	CDE-271	1917						N							2,737.3	3.0	
32N3	GS	9- 6-57	R. R. Hamersly		106.9	Dc	10	N	N			Un	Tcc	1.0		33.83	
	CDE-272	1917				D		N	N						2,721.4	9.1	
32N4	GS	9- 6-57	formerly Hawley				6	N	N			Un	Tc	.2	2,790	60.84	
32N5	GS	9- 5-57	Riverside Cement Co., well 7				6	J	E			Ir	TcN	.5	2,790	55.56	
33E1	GS	9- 6-57	S.W. Portland Cement Co., well 10		66		14	C	5			Ir	Tsl	-1.0	2,678.4	7.97	
33L1	GS	9- 6-57	S. W. Portland Cement Co., well 9		82		12	C	15			Ir	TcW	-2.5	2,673.6	5.70	
33L2	GS	9- 6-57	S.W. Portland Cement Co., well 8		109		14	N	N			Un	Tcc	0	2,681.2	9.26	
33M1	GS	9- 5-57	Gonzales					J	1			Dm			2,710	(a)	
33N1	GS	9- 6-57	S. W. Portland Cement Co., well 11		63		10	T	7½			Ir	Na		2,676.3		
33N2	GS	9- 6-57	S.W. Portland Cement Co., well 12		50		6	J	3/4			Dm	Na		2,676.8		
33N3	GS	9- 5-57	S.W. Portland Cement Co., well 15	1954	102	CG	10	T	5			In	TcW	1.0	2,715.7	c48.3	
33N4	GS	4-10-57	Vibro Tile Co., Inc.	1951	70		10	T	2			In			2,684	b45	
33P1	GS	9- 6-57	S.W. Portland Cement Co., 6	1955	123	RG	16	T	60			Ir	Tap	.5	2,682.8	d31.39	

a. Well in locked enclosure.
b. Tape smeared.
c. Pumped recently.
d. Pumping.
f. Nearby well pumping.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 4 W.--Continued												
6/4-33P2	GS	9- 6-57	S.W. Portland Cement Co., 7	1950	151	RG 12	T 50	1000	100	Ir	Tc	0	2,685.4	d23.5	L
33P3	GS	9- 6-57	S.W. Portland Cement Co., 13		40	30	N N			Un	Ncp	.5	2,681.4	12.00	
33P4	GS	9- 6-57	S.W. Portland Cement Co., 14		62.5	14	N N			Un	Na		2,680.0		
33R1	GS	8-29-57	C. L. Abbey	1950	262	C 14	T 15			Ir	Na		2,700		C,L
	GS	9- 1-55									Bpb	.3		28.62	
33-1	CDE-266		C. Bassini		75	Dr 14	C	630		Ds			2,696.4		
34E1	GS	4-30-57	Apple Valley Ranchos Water Co., well 7	1956	500	R 14	T 40	427	7	Ps	Tap	1.5	2,720	59.07	
34M1	GS	8-29-57	Jake Devilinue		60	40	L W			Dm	Tcc	3.0	2,720	51.70	
	GS	9- 1-55				Dc 10	L			Dm				50.78	
34M2	GS	8-29-57	E. Osborne	1955	60	C 8	J 1			Dm	TcW	.5	2,720	48.49	C
34M3	GS	8-29-57	L.S., D. W. Brown			8	L W			Dm	Na		2,705		C
34M4	GS	8-29-57	Robert Kappel	1955	50	8	J 3/4			Dm	TcW	.3	2,710	39.4	C
	GS	9- 1-55												39.55	
34M5	GS	8-29-57	V. Gonzales	1952	50	C 8	J 1			Dm	TcN	1.0	2,710	38.30	C

34M6	GS	8-29-57	L. Johnson	1950	52	C	6	J ½		Dm	Na		2,710	43	C
34M7	GS CDE-268	10-8-57 2-16-17	Hadley			Dr		N N		Ds			2,735	56.3	
34N1	GS GS	8-29-57 9- 1-55	J. Osborne	1955	55	C	6	J ½		Dm	TcE	0	2,710	44.45 48.25	
34N2	GS	8-29-57	D. Dyer					J 1		Dm	Na		2,710		C
34N3	GS	8-29-57	V. C. Lea		82		8	J ½		Dm	Tcc	.5	2,730	60.05	C
34N4	GS	8-29-57	G. Haines	1953	100	C		J 1		Dm	Na		2,730		C
34N5	GS	8-29-57	D. Dyer	1942	48.0	C	6	N N		Ds			2,720	dry	
34N6	GS	8-29-57	D. Dyer				12	T 5		Un	Hpb	10	2,700	11.91	C
34N7	GS	8-29-57	R. McElfresh	1954	50	CG	8	J 1		Dm	TcW	1.0	2,720	38.12	C
34P1	GS GS	8-28-57 9- 1-55	Beckman	1953	108.9	RG	12	N N		Un	TcN	.5	2,760	85.16 84.19	C
34P2	GS	8-29-57	R. McElfresh	1948	86	C	6	J 1		Un	Na		2,730		C
34P3	CDE-267	1917	C. Bassini		107		12	T	270				2,758.4	87.0	

T. 6 N., R. 5 W.

6/5-1A1	GS	10-3-57	Lloyd Payne	1953	48	CG	10	C 20		Ir	Na		2,580		
1A2	GS	10-3-57	Lloyd Payne	1942	30	C	12	C 5		Ir	Tcb	.5	2,580	17.64	
1A3	GS	10-3-57	Lloyd Payne	1950	53.2	Dc	30	C 1		Ir	TapS	.5	2,560	18.36	

d. Pumping.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)	Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 5 W.--Continued											
6/5-1A4	GS	10-3-57	Lloyd Payne	1941	40	C 30	J ½			Un	TapW 0	2,560	16.44	
1B1	GS	10-3-57	Lloyd Payne	1947	13.0	D 30	N N			Un	TapN .5	2,550	8.51	
1H1	GS	10-3-57	J. J. Newman	1946	58	C 8	L W			Dm	Hcc 1.0	2,580	13.73	
1H2	GS	10-3-57	J. J. Newman	1952	48	C 10	L 1			Dm	HpbE 1.0	2,580	13.01	
1H3	GS	10-3-57	Dewey Cook	1947	48	C 16	C 15			Ir	TcW -7.5	2,580	11.08	
1H4	GS	10-3-57	Dewey Cook	1956	60	C 16	T 15			Ir	BhcS 1.0	2,580	12.42	
1H5	GS	10-3-57	Jack Williams	1952	120	R 84	N N			Un	TcE -11.0	2,560	f16.83	
1H6	GS	10-3-57	Jack Williams	1956	60	C 12	T 5			Ir	HpbS .5	2,560	c16.54	
1J1	GS	10-2-57	L. H. Leachman			12	J 1			Dm	TcE .5	2,580	15.17	
1R1	GS	10-3-57	L. H. Leachman			14	T 10			Ir	Bhc 0	2,570	14.62	
2E1	GS CDE-287	10-10-57 2-18-18			167.0	44 D				Ds		2,780.0	204.0	
2J1	GS	10- 8-57				6	L W			Dm	TcE 1.5	2,760	183.10	

2N1	GS	10-10-57			257.2	12	N	N			Un	TcW	.5		204.32		
CDE-285			Mallman		235	12	N	N						2,786.0	208.0		
3Q1	GS	10-10-57	Rex Bean				L	1			Dm	TcE	1.0	2,790	d208.10		
4G1	GS	2-25-58			89.3	60	N	N			Ds			2,760	dry		
4N1	GS	1-17-58	Walter Bros. turkey ranch	1956	104	C 8	T	3			S	TcW	.5	2,765	85.80	L	
4P1	GS	1-17-58	Walter Bros.		114	8	S	E			Ps	BhcE	0	2,770	91.04		
4P2	GS	1-17-58	Walter Bros.		200	R 12	N	N			Un	TcE	1.5	2,770	77.97		
5R1	GS	1-17-58	Hartman			8	L	G			Dm	TcW	0	2,765	b78.78		
6B1	GS	1- 7-58			25.2	D 36	N	N			Ds			2,700	dry		
6P1	GS	1-16-58				36	L	W			Dm	TbcE	0	2,745	38.66		
6P2	GS	1-17-58	Elmer Conder	1956	80	C 8	L	G	30		Dm	TcS	.5	2,760	54.09	L	
6Q1	GS	1-17-58				?	N	N			Un			2,740			
6R1	GS	1-17-58	Burkheiser	1930	96	D 36	L	W			Dm	TcW	0	2,760	69.02		
6R2	GS	1-17-58	Elmer Conder	1956							Dm			2,760	(a)		
8D1	GS	1-17-58	Burton and Blake	1951	96	RG 8	L	W	30	7	Dm			2,770	(e)	L	
	GS	5- 9-51													68		
8D2	GS	1-17-58				D 36	L	W			Dm	Tbc	1.0	2,770	74.60		

a. Well in locked enclosure.
b. Tape smeared.
c. Pumped recently.
d. Pumping.
e. Obstruction in well above water table.
f. Nearby well pumping.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 5 W.--Continued												
6/5-8F1	GS	1-17-58	Lingren	1916	90	D 8	L W			Dm	Tbc	1.18	2,780	77.58	C,W
8F2	GS	1-17-58	W. A. McWherter	1944	100	C 8	L W			Dm	Na		2,780		
8F3	GS	1-17-58	Beudette		100	C 8	L G			Dm	Na		2,780		
8F4	GS	1-17-58	Beudette		80	D 48	L G			Un	TcW	.5	2,780	77.14	
8G1	GS	1-17-58	Martin Childer				L G			Dm	Na		2,775		
8P1	GS CDE-208	1-17-58	Campbell		10.0 295	36 Dr	N N			Ds			2,795	dry	
8Q1	GS	1-17-58			60.3	D 60	N N			Ds			2,805	dry	
9B1	GS	1-17-58	L. L. Shelton	1955	133	C 8	T 1½	4		Un	TcE	-1.0	2,780	98.86	L
10H1	GS CDE-288	10-10-57 2-18-18			79.5	D 52 D	N N			Ds			2,807.0	108.0	
10P1	GS	2-25-58	George Air Force Base		152.2	8	N N			Un	TcN	.5	2,815	106.82	
10P2	GS	2-25-58	George AFB		101.2	12	N N			Ds			2,815	dry	
12A1	GS	10-2-57	L. H. Leachman			12	T 20			Ir	Bhc	0	2,580	15.75	

12L1	GS	10-4-57	S. R. Culbertson	1954	100	R	14	T	30		Ir	TapS	.5	2,600	23.05	
12L2	GS	10-4-57	S. R. Culbertson					L	W		Dm	Tap	2.0	2,600	21.70	
12P1	GS	10-4-57	S. R. Culbertson		128.5		12	N	N		Un	TcW	.5	2,640	51.73	
12Q1	GS	10-3-57	S. R. Culbertson					J	½		Dm	Na		2,610		
12Q2	GS	10-4-57	S. R. Culbertson					T	30		Ir	Na		2,610		
13G1	GS	10-4-57	C. L. Culbertson	1957	54	C	14	T	15		Ir	ThcN	0	2,600	15.23	
13G2	GS	10-4-57	C. L. Culbertson	1948	76.8	C	14	N	N		Un	TcW	1.5	2,620	20.34	
14D1	GS	10-8-57			100		48				Ds				dry	
	CDE-291	2-18-18				D		N	N					2,823.0	113.5	
14M1	GS	10-11-57			163.5	D	45	N	N		Un	Tcr	.8		116.91	W
	CDE-200	2-13-18	H. K. Hedges			D		N	N					2,836.7	120.0	
14N1	GS	10-11-57			109.0		45	N	N		Ds				dry	
	CDE-199	2-13-18	H. K. Hedges			D		L						2,841.1	119.0	
15-1	GS	1958	U. S. Government					N	N		Ds					W
	F-15R1	11-5-53					12				Dm			2,841.0	115.49	
16R1	GS	10-10-57									Ds					
	BLM	4- 5-22	M. L. Ecles							50					105	
	CDE-201	2-13-18	E. K. Isaacs		158	Dr	12	L		225				2,838.3	102.0	
16R2	GS	11-16-58				R	12	N	N		Un	Bhc	.5	2,835	104.29	
17C1	GS	1-16-58	Mitchell					J	1½		Dm	Na		2,800		
18G1	GS	1-16-58			70	D		N	N		Ds			2,805		W
	F-18B1	11-4-47										Tcr	.4		64.2	

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 5 W.--Continued												
6/5-18P1	GS	1-16-58			62.8	D 48	N N			Un	Tcr	0	2,810	59.81	W
19B1	GS	1-16-58			27.4	D 36	N N			Ds				dry	
	CDE-309	1917	H. C. Jones		87	D	N N							75.0	
19C1	GS	1-16-58	Forest Mays		89	36	L W			Dm	Tc	.45	2,820	64.75	W
19C2	GS	1-16-58	Forest Mays		100.8	D 8	S 3			Un	Hcc	.5	2,820	65.84	
19C3	GS	1-16-58	Forest Mays	1957	200	C 6	S 1½			Ir	Tc	-.5	2,820	64.97	
19E1	GS	1-16-58				T E					Na		2,835	(a)	
19J1	GS	1-16-58	P. Stevens	1957	350	R 9	L G			Dm	TcN	1.0	2,835	79.42	
20R1	GS	1-16-58	R. D. Hawley, No. 7		175	D 12	L 5	63		Un	Hpb	.5		97.90	
	CDE-205	1918	E. H. Richardson			Dr 12	N						2,857.0	89.0	
20-1	CDE-204	2-14-18	E. H. Richardson			Dr 12	L						2,857.6	88.0	
20-2	CDE-206		E. H. Richardson			Dr	N N			Ds			2,850		
21N1	GS	1-16-58	F. Ebert	1947	380	R 12	T 10	152		Ir	TapE	1.0	2,850	95.08	
21-1	CDE-307	1917	C. A. Garbutt			D	N N						2,830	170.0	

26Q1	GS	10-10-58			5					Ds				dry			
	CDE-198	4- 5-17	J. L. Trummond		500	Dr	6						2,900	153.2			
26-1	CDE-308	1917	A. H. Diamond			D		N	N				2,875	120.0			
27-1	CDE-207	1917	W. S. Lehman		709	Dr	7	N	N				2,895	100.0			
28E1	GS	1-15-58	Deutschman	1947	200		12	S	3	27	Dm			2,875	122		W
28F1	GS	1-15-58	Deutschman		211.5		16	N	N		Un	TcN	.7	2,875.6	126.67		W
28F2	GS	1-15-58	Adelanto Community Service Distr., 2		190		8	T	10		Ps			2,875			C
28F3	GS	1-15-58	Adelanto Community Service Distr.		136.1		10	N	N		Un	TcW	0	2,875	126.77		C
	CDE-203	4- 5-17	E. H. Richardson					A		135					124.3		
28M1	GS	1-15-58	H. E. Peterson	1949	400	R	10	T	$7\frac{1}{2}$		Ir	Hph	.5	2,875	116.82		
28Q1	GS	9-11-58					12				Un	Na		2,898			
28-1	CDE-290	4-14-18	E. H. Richardson		350	Dr	8	N	N					2,878.0	133.0		
28-2	CDE-202	2-13-18	E. H. Richardson		595		12	A		225				2,879.5	113.0		L
28-3	CDE-289		E. H. Richardson			Dr	12	N	N		Ds			2,878.0			
29J1	GS	4- 7-58	Adelanto Community Service Distr., 1		190			T	10		Ps	TcW	2.13	2,880	108.84		C,W
	F-29H1	5-22-53										Tc	2.13		113.27		Wp
29H1	GS	1-15-58	Adelanto Community Service Distr.		190		14	N	N		Un	Hcc	1.0	2,880	112.28		C,W
	F-29H2	3- 5-44										Hcc	1.0		107.4		Wp

a. Well in locked enclosure.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 6 N., R. 5 W.--Continued												
6/5-30R1	GS	1-15-58	A. L. Stone		140	10	L G			Dm	TcS	0.35	2,880	107.93	W,Wp
	F-30J1	5-15-51	A. L. Stone											107.80	
	CDE-311	1917	Olive A. Stone			Dr	N N							100.0	
30-1	CDE-310	1917	J. C. White			D	N N						2,850	96.0	
32P1	GS	1-14-58	N. L. Notterman			12	N N			Ds			2,945	dry	W
	CDE-194	1917	J. Biescar		243	Dr 12	T	180						112.0	
32R1	GS	4- 7-58	N. L. Notterman							Dm			2,945	(a)	W
	F-32J1														
32R2	GS	4- 7-58	N. L. Notterman			14	L 2			Dm	TcE	1.0	2,945	122.43	
33A1	GS	10-10-57			144.0	12	N N			Ds					
	CDE-197		H. Martin			Dr	L								
33J1	GS	10-10-57	D. G. Bing	1956	210	C 12	S 3			Dm	Tap	1.5	2,930	b164.5	
33-1	F-33L1	4-29-57	McCurdy			6	N N			Ds	Tc	1.5	2,915	132.47	W
34E1	GS	10-10-57	N. Notterman		162.5	12	N N			Un	TcW	.6	2,920	156.14	W
	CDE-196	1917	J. M. Scott		157		L							137.0	

34E2	GS	10-10-57	W. S. Hibbs	1954	562		16	L	1½		Dm			2,915	(a)	
	F	4-11-55	N. Notterman									Tcc	0		201.05	
	F	11-15-54										Tcc	0		215.50	
34F1	GS	10-10-57	N. Notterman				10	N	N		Un	Na		2,920		
34H1	GS	9-18-57			223.0			L			Ds			2,915	dry	
34J1	GS	9-18-57	G. O. Erickson		25.0	D	60	N	N		Ds				dry	
	CDE-195	2-13-18	E. S. Fisk			D		L		27				2,925.0	150.0	
			T. 7 N., R. 4 W.													
7/4-5D1	GS	4-8-58	G. O. Ramey	1955	100	RG	8	T	2		Un	Na		2,470		
5D2	GS	4-8-58	G. O. Ramey	1957	100	RG	10	N	N		Un	ThcW	.5	2,465	27.00	
5D3	GS	4-8-58	Cecil Lindquist		55	C	10	J	1½		Dm	TcN	.5	2,485	46.18	
5D4	GS	6-11-58	W. Watson	1956	56	C	6	J	3/4		Dm	Tc	.4	2,475	49.47	
6A1	GS	6-5-58	Norman Goss				16	T	15		Ir			2,455		C
6D1	GS	6-5-58	Norman Goss		100		12	T	25		Ir			2,460		
6D2	GS	6-5-58	Norman Goss				8	T	3		Ir			2,460		
6F1	GS	6-5-58	Norman Goss				8	T	5		Ir	Na		2,455		
6G1	GS	6-12-58	H. G. Figgs		25.2		6	N	N		Un	Tc	1.2	2,450	13.24	
6G2	GS	6-12-58	H. G. Figgs				3	L	H		Ds			2,450	dry	

a. Well in locked enclosure.
b. Tape smeared.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. Cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 7 N., R. 4 W.--Continued												
7/4-6G3	GS	6-12-58	H. G. Figgs		50.6	6	N N			Un	Tc	0	2,450	9.84	
6G4	GS	6-12-58	Norman Goss			8	J ½			Dm	Tcc	.9	2,450	12.19	
6G5	GS	6-12-58	Norman Goss			12	T 15			Ir	Na		2,450		
6H1	GS	6-11-58	Ernest Petré	1947		D 72	L W			Un	Na		2,475		
6H2	GS	6-11-58	H. G. Figgs			14	C 25			Ir	Na		2,455		C
6J1	GS	6-11-58	Mrs. L. Rhinehardt			D 72	E			Dm			2,480		
6J2	GS	6-11-58	E. G. Mudge		79	72	C 7½			Ir			2,455	24	C
6L1	GS	6-12-58	M. K. Lewis	1925?	110	C 16	N N			Un	Tc	.5	2,450	11.51	
6L2	GS	6-12-58	M. K. Lewis	1945	40	C 8	N N			Un			2,450	10	
6L3	GS	6-12-58	M. K. Lewis	1954	108	C 8	J 2½			Dm			2,455	11	
6L4	GS	6-12-58	M. K. Lewis	1951	107	CG 16	T 10	1095	34	Ir			2,455	11	L
6M1	GS	6- 4-58	Frank Delfino			16	T 75			Ir			2,480		
6M2	GS	6-10-58	Frank Delfino			48	N N			Un	Tc	.2	2,455	5.12	

6P1	GS	6- 6-58	A. P. Schwarz	1946	80		72	T 15	Ir	Tc	10	2,460	17.51	C
6Q1	GS	6-12-58	M. K. Lewis	1908	50	D	120	C 7½	Ir			2,465	14	
6Q2	GS	6-12-58	M. K. Lewis	1956	150	C	16	T 25	Ir			2,465	14	
6R1	GS	6-11-58	J. Leckwark	1947	65	C	12	T 1	Dm	Tc	.5	2,485	44.06	L
6R2	GS	6-11-58	formerly Wheeler		49.3	D	48	T 1	Dm	Tc	2.3	2,475	21.96	
6R3	GS	6-11-58	William Watson	1954	66	C	6	S E	Dm	Na		2,490		
6R4	GS	6-11-58	A. H. Crawford	1927	48.1	D	8	L W	Dm	Tc	1.5	2,475	25.02	
6R5	GS	6-11-58	J. C. Tobin	1954	36	C	8	E 1	Dm	Na		2,470	18	L
6R6	GS	6-11-58	Horning					T ½	Dm	Tc	2.0	2,470	26.88	
6R7	GS	6-11-58	C. C. Graham	1956				T ½	Dm			2,465		
7A1	GS	6- 4-58	Skies?				12	L W	Dm	Tcc	.5	2,480	41.76	
7A2	GS	6- 6-58	F. M. Pruitt	1957	83	C	8	J ½	Dm	Na		2,490	49	
7B1	GS	6- 4-58	E. R. Smith	1952	60	D	72	C 15	Ir			2,470	23	
	CDE-305	1917	P. Herlick	1917	40	D		N N					34.0	
7B2	GS	6- 4-58	E. R. Smith	1954	30	R	24	C 3/4	Dm	Na		2,470	18	
7C1	GS	6- 6-58	C. E. Herbold	1938	5.0	D	48	N N	Ds			2,465	dry	C
7C2	GS	6- 5-58	C. E. Herbold			C	12	N N	Un	Thc	.2	2,465	26.75	
7C3	GS	6- 5-58	C. E. Herbold	1958	100	C	12	T 15	Ir			2,465		C
7C4	GS	6- 5-58	C. E. Herbold			C	8	T 3	Dm	Na		2,465		

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Well data: Depth (ft.)	Well data: Type, diameter (in.)	Well data: Pump type and power	Well data: Yield (gpm)	Well data: Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 7 N., R. 4 W.--Continued												
7/4-7G1	GS	6- 4-58	Frank Delfino				T 5			Ir			2,470		
7G2	GS	6-11-58	Frank Delfino		73.5		N N			Un	Tc	0.4	2,470	15.79	
7H1	GS	6- 4-58	E. H. Schlueter				E			Dm			2,500	(a)	
7H2	GS	6- 4-58	Leo Fosburgh		106	6	T 1			Dm	Na		2,500		
7K1	GS	6- 4-58	Frank Delfino	1954	210	C 12	T 15			Ir			2,470		C
7L1	GS	6- 4-58	Frank Delfino		171	16	T 30			Ir	ThcE	.5	2,470	d17.25	
7N1	GS	6- 4-58	Frank Delfino		180	16	T 15			Ir	ThcW	.5	2,470	12.82	
7P1	GS	6- 4-58	Frank Delfino			16	T 15			Ir			2,475		
7P2	GS	6- 4-58	Frank Delfino			16	T 10			Ir			2,470		
7Q1	GS	5-28-58	G. H. Kunsberger	1938	100	C 12	S 7½			Dm	Na		2,485	50	
7Q2	GS	5-28-58	Chris Beck	1929	100	C 12	T 10			Ir	Hpb	1.5	2,510	67.58	
7Q3	GS	6- 4-58	Mrs. M. E. Von Dettum		43	Dc 6	L W			Dm	Tc	1.5	2,490	36.07	Wp
	M-14	1-13-32	E. J. Kraus								Ls	0		22.00	
	DGT-93		Herlick		40	D								34	

7R1	GS	6- 4-58	Jones				8	T	1		Dm	Na		2,545		
8D1	GS	6- 4-58	E. Robinson	1956	96	C	6	J	1		Dm	Na		2,525	85	
8D2	GS	6- 4-58	Fred McCart	1951	106	C,R	6	T	1		Dm	Tc	1.0	2,530	87.26	
13J1	GS	4- 8-58			16.7	D	48	N	N		Un	Tcr	1.5	3,250	13.21	
18A1	GS	5-28-58	W. F. Relaford	1955	110	C	6	J	1		Dm	Na		2,540	80	
18B1	GS	5-28-58	George Sibert	1945	90	C	8	T	3/4		Dm	Na		2,495	45	
18B2	GS	5-28-58	W. Bender	1938	35	D	72	N	N		Ds	"		2,500		
18B3	GS	5-28-58	W. Bender	1957	108	C	10	J	1		Dm	Na		2,515	56	
18B4	GS	5-28-58	Floyd Barber	1938	80		10	T	3		Dm	Tc	.5	2,515	59.92	
18D1	GS	5-27-58	J. M. Harris	1953	40	C	8	J	1/4		Dm	Hcc	-3.6	2,475	8.14	
18D2	GS	5-27-58	F. J. Harris	1947	217	C	12	T	10		Ir	Na		2,475		L
	GS	6- 7-47	Harold Smith												23	
18D3	GS	5-27-58	Ethel Harper	1956	30	C	8	C	G		Dm			2,475		
18D4	GS	5-28-58	N. G. Relaford	1956	30	C	8	C	1/2		Dm	Tc	1.2	2,475	7.85	
18G1	GS	5-28-58	W. E. Cole	1950	100	C	10	L	W		Dm	Tcc	.8	2,520	62.17	L
18K1	GS	6-11-58			60		8	T	N		Ds			2,525	dry	
	CDE-306	1917	F. C. Abbott		270	Dr		C		945					55.0	
18L1	GS	5-28-58	J. H. Cahill		69	R	12	T	15		Ir	Tc	1.2	2,495	24.7	

a. Well in locked enclosure.
d. Pumping.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 7 N., R. 4 W.--Continued												
7/4-18N1	GS	5-27-58	M. R. Orebaugh		60	D 72	C 5			Un	Tc	0.4	2,495	14.52	
18P1	GS	5-27-58	M. R. Orebaugh	1930	100	C 12	S 10			Ir			2,495	(e)	
18P2	GS	5-27-58	A. Smith				T 3			Dm	Na		2,520		
18P3	GS	5-27-58	M. V. Crosby			C 12	T 3			Dm	Na		2,515		
19D1	GS	5-27-58	Adene			C 8	T 7½			Un	Na		2,495		
19E1	GS	5-23-58	Lore Latitschg			D 120	T 5			S	Tbc	-12.0	2,515	26.87	
19F1	GS	5-28-58	Adene		47	Dc 4	L W			Dm			2,510		
19F2	GS	5-27-58	W. O. Potapov		73	Dc	S 7½			Dm	HpbS	3.0	2,530	44.13	
19F3	GS	5-29-58	Jessie Bates		35	6	T 1			Dm	Na		2,530		
19G1	GS	5-29-58		1912	243		S E			Ir	Tc	0	2,550	(a) 69.3	Wp
	M-13	4- 6-32	Rowley											60.0	
	CDE-303	1917	E. B. Rowley		270	Dr	C	900							
19K1	GS	5-29-58	B. W. Craig			6	T 1			Dm	Na		2,570		
19K2	GS	5-29-58	Stedman							Dm	Na		2,570	(a)	

19K3	GS	5-29-58	S. Pope	1957			6	T	1½		Dm	Na		2,580			
19K4	GS	5-29-58						E			Dm			2,580	(a)		
19K5	GS	5-29-58	Elma Dougherty	1933	128.4	C	16	L	½		Dm	Tc	1.8	2,600	119.09		
19M1	GS	5-23-58	Sonne		90		12	T	5		Un	ThcW	.5	2,520	43.70		
19N1	GS	2-28-58	B. H. Corrington	1950	108	C		T	10		Ir	Na		2,520			
19N2	GS	5-29-58	W. E. Bolton	1920	125	Dc	8	T	1½		Dm	Na			27		Wp
	M-8	9- 4-30				D					Ir	Tcc	1.0	2,533.8	34.7		
19P1	GS	5-28-58	Harley Henderson	1948	125		6	T	3		Dm	Na		2,560			
19P2	GS	5-28-58	Jessie Bates				8	T	1		Dm	Na		2,565			
19P3	GS	5-29-58	Willard	1955	100	C	12	T	1		Dm			2,540	a27		
19Q1	GS	5-29-58	J. B. Hammond	1950	136	C	6	L	1		Dm	Na		2,600	106		L
19Q2	GS	5-29-58	M. L. Kinney	1951	112	C	6	L	1	8	Dm	Na		2,590	90		L
19Q3	GS	5-29-58	Gladys Rosenburg	1958	130	C	12	S.E			Dm	Thc	1.1	2,600	114.35		
19R1	GS	5-29-58	Wadsworth				6	L	W		Dm	Tc	0	2,640	(b)		
19-1	CDE-278	4-18-17	C. A. Poole		225	Dr	12	C		108				2,565	30.6		
19-2	CDE-304	1918	E. B. Rowley		110									2,610	92.0		
19-3	M-9	2-23-32	Nofferman Bros.									Hpb	.8	2,515	24.2		Wp

a. Well in locked enclosure.
b. Tape smeared.
e. Obstruction in well above water level.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 7 N., R. 4 W.--Continued												
7/4-25R1	GS	3-14-58	F. L. Chambers		256	10	L G			Dm			3,440	b180	
30A1	GS	4-10-58	Bernard Gollner	g1958	g80	C 6				Un			2,700	(g)	
30A2	GS	4-10-58	Allen Orcutt		285		L E			Dm			2,725	(a)	
30B1	GS	4-10-58	J. H. Hansen		195	C 8				Dm			2,625	(a)	
30B2	GS	4-10-58	Rupert Justus	1956	144	C 12	L 1			Dm	TcW	0.5	2,610	122.85	
30B3	GS	4-10-58	Carol Edenburn	1955	160	C 8	T 1			Dm	TcW	.5	2,590	104.16	
30C1	GS	3-25-58			119.9	12	N N			Un	Tc	.6		58.95	W,Wp
	M-7	9- 4-30					N N			Un	Tc	.6	2,561.5	57.0	
	CDE-276	1917	W. Watkins		202	12	T	135						54.0	
30D1	GS	4-11-58	Marter Nonmetallic Minerals Co.	1957	60	10	T 1			Dm	Tc	.5	2,530	18.88	
30D2	GS	4-11-58			20		N N			Ds			2,520		
	CDE-277	1917	W. Watkins		100	Dr 12	C							15.0	
30L1	GS	4-10-58	Vernon Chambers		110	D 20	L W			Dm	Na		2,590		
30L2	GS	4-10-58			14.7	D 48	N N			Ds			2,580	dry	

30M1	GS	4-10-58	Creson				12	J 3/4		Dm	Tcc	1.0	2,560		22.92	
30M2	GS	4-11-58	Creson		40		8	T ½		Dm	Na		2,535			
30M3	GS	4-11-58					8	T 1/3		Un	Na		2,535			
30N1	GS	4-10-58	B. Ickes	1954	80	RG	8	J 3/4		Dm	TcE	.27	2,540		29.47	
31D1	GS	4- 8-58	Detridge					T 5	5	Dm	Na		2,530			
31D2	GS	4- 8-58	Allison		40			C 5		Ir			2,540			
31E1	GS	4- 8-58	A. C. Frisbee	1956	90	C	8	T 5		Ir	TcS	.5	2,560		44.74	C,L
31E2	GS	4- 8-58					12	T		Un	Thc	.5	2,550		35.00	
31E3	GS	4- 8-58	Carl Metzermacher				6	T ¼		Un	Na		2,545			
31F1	GS	4- 8-58					6	L W		Dm	TcE	.5	2,580		62.11	
31M1	GS	4- 8-58	J. E. Barr		44.4		60	T 10		Ir	Tcr	0	2,560		22.01	C
31P1	GS	4- 8-58	William Hawson	1951	131	C	6	T 1½		Dm			2,615		92	C,L
31Q1	GS	4- 8-58	Pauline M. Peterson	1957	256		8	L H		Dm	HpbN	.5	2,745		221.46	
			T. 7 N., R. 5 W.													
7/5- 1R1	GS	2-27-58	Frank Delfino		428	R		T 30		Ir					105	Wp
	M-101	12-8-32	Merrel								Tcr	-1.0	2,478.4		27.2	
2-1	M-106	7- 6-32									Tcr	.9	2,522.4		97.3	Wp

a. Well in locked enclosure.
b. Tape smeared.
g. Being drilled.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 7 N., R. 5 W.--Continued												
7/5- 5D1	GS	8-27-58	U. S. Government		54.5 412	R 8	N N			Ds			2,712	dry 300	
7N1	GS BR	2-27-58 10-26-50	Bob's Smoke Shop C. W. Berg		178	C 6	L W			Dm	TcE Tc	0.8 .8	2,780	150.00 157.2	
13A1	GS	5-27-58	W. E. Relaford	1956	30	C 8	C G			Dm	Tc	.2	2,575	6.08	
13A2	GS	5-27-58	R. E. Taylor	1956	30	C 8	C G			Dm	Tc	1.9	2,575	6.07	
14-1	DGT-94	1919			153								2,715	143	
15P1	GS DGT-95	2-26-58 1919			135.8 138	D 36	N N			Un	Tcr	.5	2,705	132.60 132	
15R1	GS	2-27-58			296.0	C 12	N N			Un	TcN	-1.0	2,705	276.55	
15-1	CDE-283		Gwyne		235	Dr 12	N N			Ds			2,700		
18M1	GS	2-26-58			58.2	D	N N			Ds			2,775	dry	
20P1	GS	2-26-58			91.3	D 36	N N			Ds			2,665	dry	
21-1	BLM	5----22				D							2,710	70	

22N1	GS M-7c	2-26-58			88.2	D	36	N	N			Ds			2,715	dry	W,Wp
22N2	GS M-7ca	4- 7-58				C	12	N	N			Un	Tcc	1.10	2,715	95.98	W
22Q1	GS	2-26-58			88.8	D	36	N	N			Ds			2,715	dry	
22R1	GS M-7b	4- 7-58			127.5	D	36	N	N			Un	Tcr	.7	2,710.4	106.76	W
22-1	BLM	5----22	Israel Kulder		92	D	48								2,710	86	
22-2	BLM	5----22	Israel Kulder		40	D	60					Ds			2,700	dry	
24H1	GS	5-23-58	Lash									Dm			2,505	(a)	
24J1	GS	5-23-58	Sonne		90		72	T	10			Ir	Tcr	0	2,505	d30.47	
24J2	GS	5-23-58	Sonne	1951	55		12	T	3			Ir			2,505	(b)	
24J3	GS	5-23-58	Parsons		53		16	T	5	180		Ir	Tcr	.5	2,505	d19.62	
24N1	GS	2-28-58	H. H. Hill		30		12	L	W			Dm	Tbc	2.0	2,520	22.09	
24P1	GS	2-28-58	H. H. Hill	1951	121	CG	14	T	10	1250	24	Ir	BhcN	.5	2,505	7.32	L
24P2	GS	2-28-58	H. H. Hill, well 1	1938	36	D	76	C	5	442	74	Un	TcE	1.0	2,510	14.50	
24P3	GS	2-28-58	H. H. Hill, well 2		80	C	14	C		450	30	Ir	Tcc	2.0	2,510	13.25	
24R1	GS M-12b	2-28-58 9- 4-30	B. H. Corrington				76	C	E			Ir Un	Tcr Tcr	.5 .5	2,506.8	6.47 9.2	Wp

a. Well in locked enclosure.
b. Tape smeared.
d. Pumping.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 7 N., R. 5 W.--Continued												
7/5-24R2	GS	2-28-58	B. H. Corrington			D 76	N N			Un	Tcr	3.0		4.67	Wp
	M-12a	9- 7-32								Un	Tcr	3.0	2,504.4	5.0	
24R3	GS	2-28-58	B. H. Corrington	1953	80	C 6	J E			Dm	Na		2,515		
24-1	M-12	9- 7-32									Tcr	0	2,507.4	8.0	Wp
24-2	M-11	9- 2-32									Tcc	.6	2,508.6	17.2	Wp
24-3	M-10	3-20-31	Nofferman Bros.								Tcc	.2	2,513.3	28.6	Wp
25A1	GS	4-11-58	L. L. Weiss		195	C	T E			Dm	Na		2,515		L
25A2	GS	4-11-58	L. L. Weiss		10.0	12	L W			S	Tcr	1.5	2,510	5.77	
25A3	GS	4-11-58	L. L. Weiss		9.8	14	N N			Un	TcS	.5	2,510	7.05	
25A4	GS	4-11-58	L. L. Weiss	1951	47.5	8	N N	90	2	Un	TcE	0	2,510	16.41	L
25C1	GS	2-28-58	H. Hill, well 3		80	C 14	T E	630	53	Ir	Tcr	3.5	2,505	4.96	
25G1	GS	4-11-58	R. M. Hillwig	1941	90	C 14	T 15	1143		Ir	TpbN	.5	2,515	7.72	
25G2	GS	4-11-58	L. L. Weiss	1952	40.2	14	C 2			Un	TcW	0	2,510	.65	L
25G3	GS	4-11-58	L. L. Weiss	1951	36.2	12	C 2			Un	TcW	.5	2,510	.72	L

25G4	GS	4-11-58	L. L. Weiss	1950	34.2	C	14	N	N			Un	Tcr	0	2,515	7.24	L
25G5	GS	4-11-58	L. L. Weiss	1957			12	T	20			Ir	BpbW	1.0	2,515	7.28	
25G6	GS	4-11-58	L. L. Weiss	1951	48		14	C	2			Un	TcrE	0	2,515	6.71	L
25H1	GS	4-11-58	R. M. Hillwig	1951	96	C	14	C	5			Dm	TcrE	.5	2,520	9.60	L
25J1	GS	4-10-58	R. R. Jenkins	1947	108		10	J	1			Dm	TcE	-6.0	2,530	21.43	
25J2	GS	4-10-58	A. T. Davis		40			C	5			Ir	TcW	-4.5	2,515	5.53	
25J3	GS	4- 7-58	A. T. Davis		20		36	J	3/4			Dm	Tcr	0	2,520	10.88	
25J4	GS	4-10-58	Donald Venson		35		12	C	N			Dm	Tc	-4.5	2,525	11.32	
25J5	GS	4-10-58	Rosenburg		10.2		8	N	N			Un	TcN	0	2,525	8.75	
25J6	GS	4-10-58	Rosenburg		150	RG	12	T	10			Dm	TcN	1.5	2,530	11.22	
25J7	GS	4-11-58			32.4	D	36	C				Un	Tcr	0	2,530	15.20	Wp
	M-6	9-7-32				D	36					Un	Tc	-13.5		19.4	
25K1	GS	4-10-58	Rosenburg				12	J	$\frac{1}{2}$			Dm	Na		2,525		
25K2	GS	4-10-58	Rosenburg				12	N	N			Un	TcN	-6.5	2,530	9.77	
25K3	GS	4-10-58	Rosenburg				60	C	$\frac{1}{4}$			Dm	Tcr	0	2,530	9.30	
25K4	GS	4-11-58	A. Gysber	1928	75	C	12	C	$7\frac{1}{2}$	630	45	Ir			2,525		L
25K5	GS	4-10-58	A. Gysber	1951	60	CG	12	C	10			Ir	TcrW	.5	2,525	7.43	L
25Q1	GS	4-10-58	Mohart Land Co.				72	T	E			Ir	Tcr	0	2,530	12.12	

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)	Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 7 N., R. 5 W.--Continued											
7/5-25Q2	GS	4-10-58	Mohart Land Co.			T	10			Ir	Na	2,530		
25R1	GS	4-10-58			82.4	38	N N			Un	TcrW 0	2,540	27.14	
25R2	GS	4-10-58	Mohart Land Co.			48	T E			Ir	Tcr 0	2,530	11.91	
25R3	GS	4-10-58	Mohart Land Co.			14	J 1			Dm	TcS .5	2,525	11.14	
26B1	GS	4- 7-58				D 36	N N			Un	Tcr Q		168.67	W
	M-7a CDE-279	2-18-18	A. Edwards			D	N N					2,737.0	171.0	
26B2	GS	2-28-58			172.5	D 36	N N			Un		2,740		
26D1	GS	2-27-58			101.6	36	N N			Ds		2,725	dry	
26M1	GS	2-27-58			26.0	36	N N			Ds			dry	
	CDE-286	2-18-18					N N					2,724.0		
27C1	GS	2-25-58			66.0	D 48	N N			Ds		2,710	dry	
	CDE-281		Kirkpatrick			D	N							
27H1	GS	2-25-58			78.2	D 48	N N			Ds		2,725	dry	
	CDE-280		J. M. Peden			D	N N							

27N1	GS	2-25-58		75.4	D	36	N	N		Ds			2,735	dry	
27-1	CDE-282 BLM	2-18-17 4-5-22	W. Warren		D		N	N					2,718.3	81.0 90	
28E1	GS	2-26-58		62.5	D	48	N	N		Ds			2,700	dry	
28H1	GS	2-26-58		53.8	D	36	N	N		Ds			2,715	dry	
31-1	CDE-284		YMCA	230	Dr	12	N			Ds			2,725		
32G1	GS	2-26-58		75.8	D	36	N	N		Un	TcE	.5	2,740	66.70	
32L1	GS	2-26-58		249.2	C	12	N	N		Un	TcN	2.5	2,735	143.77	
34P1	GS	2-25-58		100.0		48	N	N		Un			2,750	(b)	
36A1	GS	4- 8-58	Allison	90		12	T	7		Ir	TncS	0	2,530	10.65	
36F1	GS	4- 8-58	John Pearson			12	C	7½		Ir	Tcc	0	2,525	2.84	
36H1	GS	4- 8-58	Earl Bates				T	E		Un	Na		2,535	14	
36H2	GS	4- 8-58	Earl Bates			72	C	E		Ir	Tcr	.5	2,530	8.93	
36K1	GS	4- 8-58	John Pearson	50		14	C	7½		Ir	TcS	0	2,535	2.11	
36Q1	GS	4- 8-58	John Pearson	65		14	C	7½		Ir			2,545	17	C
36R1	GS	4- 8-58	R. H. Antibus	52		12	C	10	810	Dm	Tf	-12	2,555	12.91	

b. Tape smeared.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)	Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 8 N., R. 4 W.											
8/4-17Q1	GS	8-25-58	A. A. Cole			D 72	C 15			Dm	Tcr 2.0	2,395	24.67	
17Q2	GS	8-25-58	A. A. Cole		0	D	N N			Ds		2,405	dry	C
	F	6- 2-53	A. C. Frisbie		23								19	
19J1	GS	6-19-58	L. Thomas		90	16	T 20			Ir		2,415	50	
19J2	GS	6-19-58	L. Thomas	1957	132	C 12	T G	900		Ir		2,415	60	
19J3	GS	6-19-58	L. Thomas	1900	40	72	C N			Ds		2,415	dry	C
19K1	GS	6-19-58	L. Thomas	1955	140	12	N N	250		Un		2,445	61	
19P1	GS	6-19-58			88.0	8	L W			Ds		2,450	dry	Wp
	M-20	7- 6-32											50.5	
19Q1	GS	6-19-58	McCleary		84.0	8	J 2			Dm	TcN 0	2,440	73.34	
19R1	GS	6-19-58			30.0	D 72	C E			Ds		2,415	dry	C,Wp
	M-21	8- 5-31									Tcr -1.0		18.2	
	DGT-102												52	
20A1	GS	8-25-58	A. W. Crouch	1950	25	D 48	J $\frac{1}{4}$			Dm	Tcr 0	2,400	21.09	C
20A2	GS	8-25-58	A. W. Crouch	1945	20	2	N N			Un		2,400	18	

20B1	GS F	8-25-58 10-10-55	R. Boyles Formerly A. Cates	1953	40	12	N N		Un	Tc	0	2,405	33.34 34	C	
20F1	GS	6-19-58				4	L H		Ds			2,390	dry		
20F2	GS	6-19-58				D 72			Un			2,390	(a)		
20F3	GS	6-19-58				D 72	N N		Un	Na		2,390			
20F4	GS	6-19-58				14	T 15		Un	Na		2,390			
20G1	GS	6-20-58	S. Jackson	1928	22	D 36	J ½		Dm	Tc	1.5	2,405	18.59		
20G2	GS	6-20-58	R. Boyles		60	D 72	C ¼		Dm			2,400	20	C	
20G3	GS	6-20-58	R. Boyles			C 14	T 5		Ir	Thc	1.0	2,400	20.36		
20J1	GS	6-20-58	F. F. Abken	1951	59	C 72	N N		Un	Tc	-1.0	2,400	9.69		
20J2	GS	6-20-58	F. F. Abken	1920		D 36	C ¼		Dm	Tc	1.5	2,395	7.66		
20K1	GS	6-20-58	F. F. Abken	1932	24.3	D 72	N N		Un	Tc	.8	2,400	18.29		
20K2	GS	6-20-58	F. F. Abken		56	C 14	C 5		Ir			2,405	10	L	
20N1	F M-22	3-25-58 1-10-34	R. Fotia		50	90	J 1½		Dm	Tbc Tcr	3.3 -9.0	2,410	24.43 11.47	C,W Wp	
20N2	GS	6-19-58	Fotia and Cortez		91	14	T 10		Ir			2,410	44	C	
20P1	GS	6-19-58	J. Sanders		65	8	J ½		Dm	Tcr	0	2,410	27.71	C	
20P2	GS	6-19-58	J. Sanders	1954	115	R 12	T 20		Ir			2,410	d50	C	

a. Well in locked enclosure.
d. Pumping.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 8 N., R. 4 W.--Continued												
8/4-20P3	GS	6-19-58	J. Sanders	1956		R 12	T 20			Ir			2,410	33	C
20Q1	GS M-23	6-19-58 7- 6-32	Frank Saylor Warren Smithson	1930	20	D	J 3/4			Dm	Na Tbc		2,405	12 3.5	Wp
20Q2	GS	6-19-58	Frank Saylor	1930	20	D 6	C 2			Dm			2,405	12	
20Q3	GS	6-19-58	Frank Saylor	1955	128	R 16	T 7½			Ir	Na		2,405	14	
20Q4	GS	6-19-58	Bradley Ranch			D 48	C 1			Ir	Tcr	1.1	2,405	16.99	
20R1	GS	6-20-58	Abken	1930	30	D	N N			Un	Na		2,390		
20R2	GS	6-20-58	Abken	1925	30	D	N N			Un	Na		2,390		
21E1	GS	8-29-58	John Owens			D 30	N N			Un			2,385	6	
21F1	GS	8-29-58	John Owens	1954	180	14	T 40			Ir	Bhc	1.0	2,385	6.18	C
21F2	GS	8-29-58	John Owens		50	14	S E			Un	TcE	1.0	2,385	7.26	C
29B1	GS	6-18-58	R. W. McClary	1957	143	C 12	T 30			Ir			2,400	12	
29C1	GS	6-19-58	R. W. McClary		15.0	D 72	N N			Ds			2,410	dry	

29C2	GS	6-19-58	R. W. McClary		8.0		12	N	N			Ds			2,410	dry		C
29D1	GS	6-18-58	R. W. McClary	1947	100		C 16	N	N			Unf	Tc	0	2,410	27.94		
29D2	GS	6-18-58	R. W. McClary		15.0		D 72	N	N			Ds			2,410	dry		
29E1	GS	6-18-58	R. W. McClary	1951	90		R 12	T	25			Ir			2,410	12		
29J1	GS	6-18-58						N	N			Un	Na		2,400			
29M1	GS	6-19-58	R. W. McClary	1955	238		C 12	T	30			Ir			2,410	12		
29M2	GS	6-18-58	R. W. McClary	1953	82		16	T	15			Ir			2,415	10		
29N1	GS	6-18-58	R. W. McClary	(g)	(g)		R 14					Un			2,410	(g)		
29N2	GS	6-18-58	R. W. McClary	1958	100		14	T	20			Ir	Na		2,420	6		
30A1	GS	6-18-58	Judge Volks					D				Un	Na		2,415			
30A2	GS	6-18-58	Judge Volks	1951	90		RG 20	T	20	1,116	74	Ir	Tc	.2	2,415	33.67		L
30A3	GS	6-19-58	Judge Volks									Dm			2,410			
30E1	GS	6-18-58	C. Smith	1955	405		14	T	25			Ir			2,470			C
30F1	GS	6-18-58	C. Smith	1951	364		RG 14	T	25			Ir			2,445	40		C,L
30G1	GS	6-18-58	C. Smith	1953	212		14	T	25			Ir			2,430	40		C
30H1	GS	6-18-58	C. Smith		55		10	C	5			Dm	Hcc	1.5	2,420	24.78		C
30H2	GS	6-18-58	C. Smith		27.5		D 48	C	7½			Un	Tc	-9.0	2,415	21.92		Wp
	M-24	5-26-32	Helendale Orchards										Tf			.4		
	DGT-101		J. L. Thompson		35		D 60			810						10		

g. Being drilled.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 8 N., R. 4 W.--Continued												
8/4-30M1	GS	6-18-58	Frank Delfino			14	T 50			Ir			2,465		
30N1	GS	6- 4-58	Frank Delfino			12	T 50			Ir	Hcc	0	2,465	(b)	
30N2	GS	6- 4-58	Frank Delfino		59.5	12	N N			Ds			2,450	dry	C
30Q1	GS	6- 4-58	Frank Delfino				C $\frac{1}{4}$			Dm	Tc	2.3	2,435	2.66	C
30R1	GS	6-10-58	Frank Delfino				E			Dm	Na		2,430		
31C1	GS	6- 4-58	Frank Delfino			12	T 25			Ir			2,445		
31D1	GS	6- 5-58	Frank Delfino			89	T $7\frac{1}{2}$			Un	Tcr	1.0		56.96	C,W
	M-19	12-8-32	F. H. Merrell								Tcr	1.0	2,464.6	43.64	Wp
31D2	GS	6- 4-58	Frank Delfino			16	T 50			Ir			2,465		
31D3	GS	6- 4-58	Frank Delfino			16	T 40			Ir	Tc	0	2,450	43.89	
31D4	GS	6-10-58	Frank Delfino		160	14	N N			Un	Tc	.3	2,460	49.42	
31F1	GS	6- 4-58	Frank Delfino			12	T 10			Ir			2,445		
31F2	GS	6- 4-58	Frank Delfino				T 15			Ir			2,445		

31J1	GS	6-11-58	J. M. Scoggin		60				Na		2,440	12	C
31N1	GS	6- 4-58	Frank Delfino			16	T 100	Ir			2,455		
31R1	GS	3-25-58	Fred Orebaugh		60				Tc	-12.82	2,450	19.97	C,W
	M-15	11-5-31				14			Tcr	-10.71		15.42	Wp
31R2	GS	6-12-58	R. Griffin		59	R 16	C 5	Ir			2,440	16	
31-1	GS	6-19-58	C. Smith	1951	48	12	N N	Ds			2,420		
31-2	M-18	1- 7-32	F. H. Merrell			24			Tc	.9	2,445	16.2	Wp
31-3	M-17a	5-26-32							Tap		2,440	1.6	Wp
31-4	M-17	5-26-32	F. H. Merrell			14			Tc	-4.0	2,435	4.4	Wp
32C1	GS	6-17-58	Frank Delfino				C $\frac{1}{4}$	Dm	Tc	0	2,425	6.89	
32C2	GS	6-17-58	ATSF Ry	1914	50	C 10	T 5	In			2,430	(a)	L
32E1	GS	9- 3-58	Helendale School		600	14	N N	Un	Tc	.5	2,425	12.11	
32E2	GS	6-19-58	Helendale Comm. Church			6	C 1/3	Dm	Na		2,430		
32F1	GS	6-17-58						Dm			2,445	(a)	
32L1	GS	6-17-58	California Highway Dept.				T 3	Dm	Na		2,440		
32M1	GS	6-12-58	Helendale School			14	T 2	Dm	Tc	-5.8	2,430	10.05	C
32M2	F-32X1 GS	6-12-58	J. M. Scoggin			12	C $\frac{1}{2}$	Dm	Tc	1.0	2,430	9.75	
32M3	GS	6-17-58	J. M. Scoggin				L $\frac{1}{4}$	Un	Na		2,430		

a. Well in locked enclosure.
b. Tape smeared.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 8 N., R. 4 W.--Continued												
8/4-32M4	GS	6-12-58	J. M. Scoggin			D 24	L H			Dm	Tcr	1.8	2,430	8.44	C
32N1	GS	6-12-58				8	C ½			Dm	Na		2,440		
32N2	GS	6-11-58	ATSF Ry, Helendale 1		10	D 70	N N			Ds			2,455	dry	
	R DGT-103	12-16-32		1884	30	D 84		115						9.2 10	C
32-1	M-16	3-23-32	Helendale Store								Tcr	0	2,460	25.3	Wp
			T. 8 N., R. 5 W.												
8/5- 7F1	GS	8-26-58	U. S. Government, Adelanto Devel. Corp., well G3	1956	2539	R 11	N N			Ds	Na		2,685		L
14H1	GS	8-26-58	Mrs. Turuo, Adelanto Devel. Corp., G2	1955	2085	R 11	N N			Ds	Na		2,680		L
19C1	GS	8-26-58	U.S. Government		190	DA 36	N N			Ds			2,734	dry	
21C1	GS	8-26-58	E. L. Poper	g1958	g210	C 6	N N			Un			2,620	g210	
21F1	GS	8-26-58	Tikumoff	1931	228	C 5	L G			Dm	Tap	1.1	2,605	196.70	C

25R1	GS	6- 5-58	J. C. Huchingson	1951	140	R 8	T 5		Dm	Bhc	0	2,465	112.05		C
31F1	GS	8-27-58	U. S. Government		317.2	11	N N		Un	Tc	-1.0	2,759	317.0		
31F2	GS	8-27-58	U. S. Government		1.0	11	N N		Ds			2,759	dry		
			T. 8 N., R. 6 W.												
8/6-12B1	GS	8-26-58	U. S. Government, Adelanto Devel. Corp., well G1	1954	4122	R 11	N N		Ds	Na		2,705			L
14Q1	GS F	4- 7-58	Elizabeth Astley	1935	310	C 8	L W		Dm	Tap	.78	2,760.4	193.68		W
15H1	GS	11-4-58	Dr. Eams			C 8	L W		Dm	TcW	0	2,775	153.07		
30K1	GS	8-27-58	Just Associates		174.5	R 14	N N		Ds			3,240	dry		
			T. 8 N., R. 7 W.												
8/7-14P1	GS	8-27-58	Blake Ranch		0		N N		Ds			2,920	dry		
18E1	GS	8-27-58	U. S. Government		130	8	L N		Un	Tap	1.35	2,910	98.09		
19E1	GS	8-27-58	L. A. Peach						Dm			3,040	(a)		
21E1	GS	8-28-58	J. Houze	1958	180	C 8	L G		Dm	Na		2,965			
21L1	GS	8-28-58	J. Houze	1958	256	C 8	L N		Un	Na		2,965			

a. Well in locked enclosure.
g. Being drilled.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Well data: Depth (ft.)	Well data: Type, diameter (in.)	Well data: Pump type and power	Well data: Yield (gpm)	Well data: Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 8 N., R. 8 W.												
8/8-24J1	GS	8-27-58				8	L G			Dm	Hcc	0.9	3,040	97.73	
			T. 9 N., R. 5 W.												
9/5-31N1	GS	8-28-58	U. S. Government		900	R 14	N N			Un			2,695	230	
31P1	GS	8-28-58	U. S. Government		300	R 14	N N			Un	Hcc	.5	2,695	231.16	
			T. 9 N., R. 6 W.												
9/6-34B1	GS	8-26-58	U. S. Government		300	8	N N			T	Na		2,750		C
	GS	5- 4-53			106.5					Un	Tc	0		99.55	
			T. 10 N., R. 6 W.												
10/6-3E1	GS	8-25-58			224	Dr 10	N N			Ds			2,455	dry	
	GS	4-22-53					N N				Tc	.5		212.5	
	GS	10-24-52					L W			Un	Tc	.5		210.7	
5E1	GS	8-25-58	Darr and Caillier	1942	450	Dr 8	T 2			Dm	Hcc	-1.0	2,475	203.60	L
	GS	10-23-52					T 2			Dm	Na				
	GS	1942	George Beecher											190	

5E2	GS	8-25-58	Darr and Caillier		0				Ds			2,470			
	GS	10-23-52	George Beecher		0				Ds						
	BR	10-30-50	H. B. Julien	1930	340	Dr	10	T 5	Dm	Hpb	.2		188.5		
5E3	GS	8-25-58	Darr and Caillier	1949	440	Dr	10	T 10	Ps			2,470			C,W
	F-5F1	3-25-58								Hpb	.3		204.20		Wp
5E4	GS	8-25-58	Darr and Caillier	1935	0	Dr	8	N N	Ds			2,470	dry		
	GS	12-1-54			185				Ds				dry		
	GS	10-23-52	Robert Caillier		265			N N	Un	Tc	1.0		194.00		
5E5	GS	8-26-58	California Electric		258.8	Dr	14	N N	Un			2,475	(e)		C,L
	GS	11-18-55	Power Co.										(e)		
	GS	3- 3-55								TcS	0		174.77		
	GS	12-1-54			258.8					TcS	0		174.95		
	GS	4-22-53			285	Dr	14			TcS	0		175.23		
5E6	GS	8-25-58	Darr and Caillier		237.5	C	10	N N	Un	Tc	.5	2,475	201.51		
5F1	GS	8-25-58	Carl Siders	1949	h387	Dr	10	T 3	Dm	Na		2,475			L
	GS	10-23-52					10	T 3	Dm						
	GS	10----49			234								192		
6L1	GS	8-25-58	R. Chessman		380	Dr	6½	L G	Dm	Tc	2.0	2,500	200.02		
	GS	12-1-54						L G	Dm	Tc	2.0		192.72		
	GS	4-22-53						N N	Un	Tc	2.0		192.0		
6P1	GS	8-25-58	R. Chessman			C	5	N N	Un	Na		2,510			
6-1	DGT-6	1919			200				Ds			2,490	dry		

e. Obstruction in well above water level.
h. Well deepened.

USGS number	Source of data and other numbers	Date of observation	Owner or user	Well data: Year completed	Depth (ft.)	Type, diameter (in.)	Pump type and power	Yield (gpm)	Sp. cap.	Use	Measuring point (feet)		Altitude of lsd (feet)	Water level: Depth below lsd (feet)	Other data
			T. 10 N., R. 6 W.--Continued												
10/6-20M1	DFC-1	5----55	U. S. Air Force	1955	1561	R	N N						2,700	120	L
20M2	SFC-1	1957	U. S. Air Force	1957	3500	R	N N			Ds			2,700		L
			T. 10 N., R. 7 W.												
10/7- 2C1	GS	8-25-58	A. A. Sharp			D	N N			Ds			2,490		
2-1	DGT-4	1919	ATSF RR		871	Dr 10							2,490	200	
2-2	DGT-3	1919			200	Dr 8	L W						2,485	165	
2-3	DGT-5	1919			300								2,525	200	
4A1	GS	8-25-58	O. E. Atterberry		263	Dr 8	T 3			Dm	Hpb	0.5	2,505	182.02	
4A2	GS	8-25-58	Mrs. Eckery		240	Dr 8	L W			Dm			2,503		
	GS-3D1	4-17-53	Mrs. Eckery				L W			Dm	Tc	0		180.0	

T. 11 N., R. 6 W.

11/6-31R1	GS	8-25-58	Wilk	1955		RG	14	T	40			Ps	Tap	.24	2,455	196.78 W
31-1	GS	1958	G. K. Hogan, . . J. DeFon	1946	220					7		-			2,450	172 L

T. 11 N., R. 7 W.

11/7-34P1	GS	8-25-58	Grace Davidson	1938	408	C	8	L	G	6		Dm	Na		2,497	
	GS	4-17-53			720		8	L	G			Dm	Na			

Table 2.--Cross index of other well numbers and Geological Survey numbers

The first column shows the number assigned to the well by the other agency indicated and the second column shows the Geological Survey number assigned to the same well. The numbers of the other agencies are listed consecutively. Numbers missing in the consecutive listings are for wells outside the west part of the Middle Mojave Valley area, for wells for which no data are available, or for wells for which the other numbers and Geological Survey numbers are the same. CDE numbers are after California Department of Engineering (1918) and Thompson (1929, p. 399-401). DGT numbers are after Thompson (1929, p. 271 and 436).

Part 1. California Department of Engineering (CDE) 1918, and Thompson (DGT) 1929

CDE number	USGS number	CDE number	USGS number	DGT number	USGS number
194	6/5-32P1	279	7/5-26D1	3	10/7- 2-2
195	34J1	280	27E1	4	2-1
196	34E1	281	27C1	5	2-3
197	33A1	282	27-1	6	10/6- 6-1
198	26Q1	283	15-1	93	7/4- 7Q3
199	6/5-14N1	284	7/5-31-1	94	7/5-14-1
200	14M1	285	6/5- 2N1	95	15P1
201	16R1	286	7/5-26M1	101	8/4-30H2
202	28-2	287	6/5- 2E1	102	19R1
203	28F3	288	10H1	103	32N2
204	6/5-20-1	289	6/5-28-3	341	6/4-27-1
205	20R1	290	28-1	342	27-2
206	20-2	291	14D1		
207	27-1	302	6/4- 6E9		
208	8P1	303	7/4-19G1		
266	6/4-33-1	304	7/4-19-2		
267	34P3	305	7B1		
268	34M7	306	18K1		
271	32N2	307	6/5-21-1		
272	32N3	308	26-1		
273	6/4-18-1	309	6/5-19B1		
274	18P3	310	30-1		
275	18P4	311	30R1		
276	7/4-30C1				
277	30D2				
278	19-1				

Part 2. M-numbers assigned by all agencies doing ground-water work prior to July 1, 1943, when the Geological Survey numbering system was adopted (U. S. Geological Survey, 1945)

M number	USGS number	M number	USGS number
1	6/4-29-1	15	8/4-31R1
2	30-1	16	32-1
3	19-1	17	31-4
4	7N2	17a	31-3
5	6E9	18	31-2
6	7/5-25J7	19	31D1
7	7/4-30C1	20	19P1
7a	7/5-26B1	21	19R1
7b	22R1	22	20N1
7c	22N1	23	20Q1
7ca	7/5-22N2	24	30H2
8	7/4-19N2	101	7/5- 1R1
9	19-3	105	6/4-30D5
10	7/5-24-3	106	7/5-2-1
11	24-2		
12	7/5-24-1		
12a	24R2		
12b	24R1		
13	7/4-19G1		
14	7Q3		

Part 3. San Bernardino County Flood Control District (F), given only where different from Geological Survey number

F number	USGS number	F number	USGS number
6/4-19G1	6/4-19-1	6/5-30J1	6/5-30R1
6/5-15R1	6/5-15-1	32J1	32R1
18B1	18G1	33L1	33-1
29H1	29J1	8/4-32X1	8/4-32M1
29H2	29H1	10/6- 5F1	10/6- 5E3

Table 3.--References that contain water-level measurements in wells in the west part of the Middle Mojave Valley area, California

Years for which measurements are available	Reference[1/]	Year of publication
1912, 1917-18	California Department of Engineering	1918
1905-32	California Division of Water Resources	1934
1946-50	San Bernardino County Flood Control District	1951
1951-52	San Bernardino County Flood Control District	1954
1952-54	San Bernardino County Flood Control District	1958

U. S. Geological Survey Water-Supply Papers[1/]

Years for which measurements are available	No. of Water-Supply Paper	Year of publication	Years for which measurements are available	No. of Water-Supply Paper	Year of publication
1912, 1917-18, 1928	578	1929	1947	1101	1951
a1905-39	886	1940	1948	1131	1951
1940	911	1941	1949	1161	1952
1941	941	1943	1950	1170	1953
1942	949	1944	1951	1196	1954
1943	991	1945	1952	1226	1955
1944	1021	1947	1953	1270	1956
1945	1028	1949	1954	1326	1957
1946	1076	1949	1955	1409	1957

1. For complete titles see references.

a. Measurements for years prior to 1932 are reprinted from earlier publications cited above.

Table 4.--Wells for which periodic water-level records are available

(Published and unpublished data)

USGS number	F number[1]	M number	CDE or DGT number[2]	Records available (years)[3]
6/4-6E9		5	302	1917, 1930-32
7N2		4		1930-32
19-1	19G1	3		1930-32, 1934-47
29-1		1		1930-32
30D5		105		1930-31
30-1		2		1930-32
6/5-8F1				1947-58
14M1			200	1918, 1947-58
15-1	15R1			1947-54
18G1	18B1			1947-48, 1950, 1952, 1954
6/5-18P1				1947-56, 1958
19C1				1947-50, 1952-58
28E1				1949-50, 1952, 1958
28F1				1947-48, 1950-58
29J1	29H1			1953-58
29H1	29H2			1944-48, 1951, 1954-56, 1958
30R1	30J1		311	1917, 1947-58
32P1			194	1917, 1947, 1949-51, 1953-55, 1958
32R1	32J1			1948-55, 1957
33-1	33L1			1948-57
34E1			196	1917, 1948-53, 1957
7/4- 7Q3		14	93	1925, 1931-32
19G1		13	303	1918, 1922-23, 1930-32
19N2		8		1930-32
19-3		9		1930-32
30C1		7	276	1917, 1930-32, 1935-58
7/5- 1R1		101		1930-32
2-1		106		1930-32
22N1		7c		1950, 1953-56, 1958
22N2		7ca		1956-58
22R1		7b		1950, 1953-58
24R1		12b		1930-32
24R2		12a		1930-32
24-1		12		1930-32
24-2		11		1930-32
24-3		10		1930-31
25J7		6		1930-32
26B1		7a	279	1918, 1950, 1953-58

1. San Bernardino County Flood Control District numbers are shown only where different from U. S. Geological Survey numbers.

2. California Department of Engineering (1918) data are also shown in WSP 578 by D. G. Thompson (1929).

3. See table 3 for references to published water-level measurements; see table 1 or 5 for unpublished water-level measurements.

USGS number	F number[1]	M number	CDE or DWR number[2]	Records available (years)[3]
8/4-19P1		20		1930-32
19P1		21	102	1918, 1930-31
20N1		22		1930-32, 1934-47, 1951-58
20Q1		23		1930-32
30H2		24	101	1919, 1930-32
31D1		19		1930-32, 1934-58
31R1		15		1930-32, 1934-56, 1958
31-2		18		1930-32
31-3		17a		1930-32
31-4		17		1930-32
32-1		16		1930-32
8/6-14Q1				1953-58
10/6-5E3	5F1			1953-58
11/6-31R1				1955-58

1. San Bernardino County Flood Control District numbers are shown only where different from U. S. Geological Survey numbers.

2. California Department of Engineering (1918) data are also shown in WSP 578 by D. G. Thompson (1929).

3. See table 3 for references to published water-level measurements; see table 1 or 5 for unpublished water-level measurements.

Table 5.--Records of water levels in wells

Table 5 includes all unpublished records for wells having more than five water-level measurements; wells having less than five measurements are shown in table 1. Also included in this table are the complete published and unpublished records for wells

6/5-14M1	7/5-20R1
29J2	8/4-20N1
34E1	31R1
7/4-30C1	

which have been selected as representative to show the range of water-level fluctuations in different parts of the area.

Altitudes given are in feet above mean sea level for the land-surface datum at the well. Land-surface datum is a plane of reference which approximates land surface. Altitudes given in whole feet are interpolated from topographic maps. Altitudes given in feet and tenths were determined by spirit leveling (from California Department of Engineering or U. S. Bureau of Reclamation records).

Measurements. Most of the water-level measurements were made by the U. S. Geological Survey (GS) mainly in years prior to 1954; by the U. S. Bureau of Reclamation (BR) mainly in 1946 and 1947; and by the San Bernardino County Flood Control District (F) mainly in the years since 1953. All measurements of water level have been adjusted to depth below land-surface datum. That is, the altitudes of the measuring points as reported above or below land-surface datum have been subtracted from or added to the water-level measurements.

Depth of well. The depth given is the reported depth of the well or the depth measured by the Geological Survey at the time of the field canvass. On some dates the depth to water level given in the table exceeds the reported or measured depth of the well. This probably results from a progressive filling of the well with sand or other material.

6/5-8F1. Lingren. Depth about 90 feet. Altitude about 2,780 feet. Records available: 1947-58. Records furnished: F except as indicated.

Date	Water level	Date	Water level	Date	Water level
Oct. 23, 1947	78.6	Nov. 27, 1951	77.3	Dec. 5, 1955	77.40
May 4, 1948	79.6	May 13, 1952	79.6	Apr. 3, 1956	a77.40
Nov. 23	77.6	Nov. 29	82.76	Dec. 17	77.13
May 25, 1949	78.8	May 22, 1953	79.32	Apr. 29, 1957	78.84
Jan. 11, 1950	78.0	Nov. 5	79.32	Jan. 17, 1958	a77.58
May 8	77.6	May 10, 1954	a79.15	Apr. 7	a77.59
Nov. 16	77.6	Nov. 15	78.42		
May 15, 1951	77.47	Apr. 11, 1955	77.72		

6/5-14M1 (CDE-200). H. K. Hedges. Depth 163.5 feet. Altitude 2,836.7 feet. Records available: 1918, 1947-58. Records furnished: F, except as indicated.

Feb. 13, 1918	d120.0	May 15, 1951	117.65	Apr. 11, 1955	118.30
Oct. 21, 1947	118.2	Nov. 27	118.7	Dec. 5	117.1
May 4, 1948	117.9	May 13, 1952	117.7	Apr. 3, 1956	a117.98
Nov. 23	118.2	Nov. 29	117.95	Dec. 17	117.20
May 25, 1949	117.7	May 22, 1953	117.37	Apr. 29, 1957	118.46
Jan. 11, 1950	118.6	Nov. 5	117.70	Oct. 11	a116.91
May 8	120.7	May 10, 1954	118.00	Apr. 7, 1958	a116.67
Nov. 16	117.6	Nov. 15	118.27		

6/5-15-1 (F-15R1). George Air Force Base. Altitude 2,841.0 feet. Records available: 1947-54. Records furnished: 1947-50, BR; 1951-54 F.

Oct. 21, 1947	116.0	May 8, 1950	116.9	Nov. 29, 1952	115.7
May 4, 1948	115.9	Nov. 16	116.2	May 22, 1953	115.59
Nov. 23	115.8	May 15, 1951	116.4	Nov. 5	115.49
May 25, 1949	116.0	Nov. 26	115.9	?	1954 plugged
Jan. 11, 1950	116.0	May 13, 1952	115.7		

6/5-18G1 (F-18B1). Depth about 70 feet. Altitude about 2,805 feet. Records available: 1947-48, 1950, 1952, 1954. Records furnished: F

Nov. 4, 1947	64.2	Jan. 11, 1950	65.5	Nov. 29, 1952	67.90
May 5, 1948	66.6	May 8	67.8	?	1954 destroyed
Nov. 23	64.3	May 13, 1952	65.8		

6/5-18P1. Depth 62.8 feet. Altitude about 2,810 feet. Records available: 1947-56, 1958. Records furnished: F, except as indicated

Nov. 3, 1947	60.0	May 15, 1951	59.62	Nov. 13, 1954	64.30
May 4, 1948	60.0	Nov. 27	59.5	Apr. 11, 1955	63.60
Nov. 23	61.1	May 13, 1952	59.9	Dec. 5	64.00
May 25, 1949	59.6	Nov. 28	59.92	Apr. 5, 1956	62.92
Jan. 11, 1950	60.2	May 22, 1953	60.60	29	59.70
May 8	60.0	Nov. 5	60.40	Jan. 16, 1958	a59.81
Nov. 16	60.4	May 10, 1954	66.70	Apr. 7	a61.43

a. Measurement by Geological Survey.
d. Measurement by California Department of Engineering.

6/5-19C1. Forest Mays, formerly S. Austin. Depth about 89 feet. Altitude about 2,820 feet. Records available: 1947-50, 1952-58. Records furnished: F, except as indicated.

Date	Water level	Date	Water level	Date	Water level
Nov. 3, 1947	69.4	Nov. 28, 1952	64.35	Apr. 3, 1956	64.26
May 4, 1948	64.4	May 22, 1953	64.30	Dec. 17	64.88
Nov. 23	64.6	Nov. 5	64.30	Apr. 29, 1957	64.99
May 25, 1949	66.4	May 10, 1954	65.30	Jan. 16, 1958	a64.75
Jan. 11, 1950	64.4	Nov. 15	64.30	Apr. 7	a64.87
May 8	64.8	Apr. 11, 1955	64.12		
May 13, 1952	64.4	Dec. 5	64.30		

6/5-28E1. John Deutschman. Depth about 200 feet. Altitude about 2,875 feet. Records available: 1949-50, 1952, 1958. Records furnished: 1949-50, 1952, F; 1958, reported measurement by owner.

May 26, 1949	121.8	Nov. 16, 1950	115.1	Nov. 29, 1952	94.80
Jan. 11, 1950	120.3	May 13, 1952	121.33	Jan. 15, 1958	122

6/5-28F1. John Deutschman. Depth 211.5 feet. Altitude 2,875.6 feet. Records available: 1947-48, 1950-58. Records furnished: 1947-48, 1950, BR; 1951-58, F, except as indicated.

Oct. 23, 1947	127.3	Nov. 29, 1952	130.35	Apr. 3, 1956	a128.15
May 4, 1948	128.72	May 22, 1953	128.65	Dec. 17	124.65
Nov. 23	126.6	Nov. 5	126.20	Apr. 29, 1957	129.29
Nov. 16, 1950	126.1	May 10, 1954	129.60	Jan. 15, 1958	a126.67
May 15, 1951	126.7	Nov. 15	127.50	Apr. 7	a127.69
Nov. 27	124.8	Apr. 11, 1955	126.75		
May 13, 1952	131.6	Dec. 5	122.40		

6/5-29J1 (F-29H1). Adelanto Community Service District. Depth about 190 feet. Altitude about 2,880 feet. Records available: 1953-58. Records furnished: 1953-57, F; 1958, GS.

May 22, 1953	113.27	Apr. 11, 1955	110.49	Apr. 29, 1957	112.15
Nov. 5	137.67	Dec. 5	146.27	Apr. 7, 1958	a108.84
May 10, 1954	114.92	Apr. 3, 1956	142.97		
Nov. 15	110.60	Dec. 17	109.67		

6/5-29H1 (F-29H2). Adelanto Community Service District. Depth about 190 feet. Altitude about 2,880 feet. Records available: 1944-48, 1951, 1954-56, 1958. Records furnished: F, except as indicated.

Mar. 5, 1944	107.4	Nov. 23, 1948	112.3	Apr. 3, 1956	a144.10
Jan. 5, 1945	107.8	May 15, 1951	111.20	Dec. 17	107.25
Mar. 13, 1946	109.5	Nov. 15, 1954	111.73	Jan. 15, 1958	a112.28
Nov. 3, 1947	111.4	Apr. 11, 1955	111.62	Apr. 7	a110.81

a. Measurement by Geological Survey.

6/5-30R1 (F-30J1, CDE-311). A. L. Stone, formerly Olive Stone. Depth about 140 feet. Altitude about 2,880 feet. Records available: 1917, 1947-58. Records furnished: 1947-50, BR; 1951-57, F; 1958, GS.

Date	Water level	Date	Water level	Date	Water level
Nov. 3, 1947	107.6	May 13, 1952	112.6	Dec. 2, 1955	108.15
May 4, 1948	107.6	Nov. 29	109.6	Apr. 3, 1956	108.75
Nov. 23	107.6	May 22, 1953	108.25	Dec. 17	108.15
May 25, 1949	107.4	Nov. 5	108.25	Apr. 29, 1957	108.03
May 8, 1950	107.8	May 10, 1954	108.50	Jan. 15, 1958	107.93
Nov. 16	107.8	Nov. 15	108.09	Apr. 7	107.83
May 15, 1951	107.80	Apr. 11, 1955	107.97		

6/5-32P1 (CDE-194). N. L. Notterman, formerly J. Biescar. Depth about 243 feet. Altitude about 2,945 feet. Records available: 1917, 1947, 1949-51, 1953-55, 1958. Records furnished: 1947, 1949-51, 1953-55, F; 1917, 1958, GS.

1917	d112.0	May 8, 1950	118.0	Feb. 10, 1954	121.65
Nov. 3, 1947	142.0	Nov. 26, 1951	119.6	Apr. 11, 1955	125.75
May 25, 1949	117.2	May 22, 1953	120.82	Jan. 14, 1958	dry
Jan. 11, 1950	117.8	Nov. 5	122.30		

6/5-32R1 (F-32J1). N. L. Notterman, formerly J. W. Tobin. Altitude about 2,945 feet. Records available: 1948-55, 1957. Records furnished: F.

May 4, 1948	115.9	May 15, 1951	118.37	May 10, 1954	120.90
Nov. 23	116.5	Nov. 26	119.4	Nov. 15	127.70
May 25, 1949	116.8	May 13, 1952	122.5	Apr. 11, 1955	121.35
Jan. 11, 1950	116.9	Nov. 29	121.4	Apr. 29, 1957	122.92
May 8	117.3	May 22, 1953	120.90		
Nov. 16	117.4	Nov. 5	122.20		

6/5-33-1 (F-33L1). McCurdy. Altitude about 2,915 feet. Records available: 1948-57. Records furnished: F.

May 4, 1948	126.5	Nov. 26, 1951	130.2	Apr. 11, 1955	131.95
Nov. 23	127.1	May 13, 1952	131.0	Dec. 5	132.00
May 25, 1949	127.3	Nov. 28	130.8	Apr. 3, 1956	131.93
Jan. 11, 1950	127.8	May 22, 1953	130.80	Dec. 17	132.40
May 8	127.9	Nov. 5	133.10	Apr. 29, 1957	132.47
Nov. 16	128.6	May 10, 1954	130.80		
May 15, 1951	129.33	Nov. 15	131.94		

6/5-34E1 (CDE-196). N. L. Notterman, formerly J. M. Scott. Depth 162.5 feet. Altitude about 2,920 feet. Records available: 1917, 1948-53, 1957. Records furnished: 1948-53, F; 1917, 1957, GS.

1917	d137.0	May 8, 1950	194.0	Nov. 28, 1952	179.75
May 5, 1948	173.7	Nov. 16	200.0	Apr. 22, 1953	169.00
Nov. 23	174.6	May 15, 1951	200.71	Nov. 5	170.16
May 25, 1949	167.3	May 14, 1952	175.0	Oct. 10, 1957	156.14

d. Measurement by California Department of Engineering.

7/4-30C1 (M-7, CDE-276). Formerly W. Watkins. Depth 119.9 feet. Altitude 2,561.5 feet. Records available: 1917, 1930-32, 1935-58. Records from Geological Survey Water-Supply Papers or from F, except as indicated.

Date	Water level	Date	Water level	Date	Water level
1917	d54.0	Sept. 16, 1946	b57.3	Jan. 17, 1949	57.6
Sept. 4, 1930	57.0	23	b57.3	Feb. 17	57.4
Oct. 4	56.92	30	b57.3	Mar. 16	57.2
Dec. 12	56.77	Oct. 6	b57.3	Apr. 14	58.2
Feb. 6, 1931	56.59	15	b57.2	May 9	58.17
Mar. 20	56.70	21	b57.3	June 16	58.4
Apr. 24	56.70	28	b57.2	July 14	59.7
May 21	56.70	Nov. 6	b57.2	Aug. 18	58.5
July 29	56.29	18	b57.1	Sept. 15	58.3
Sept. 2	57.21	25	b57.1	Oct. 19	58.2
Oct. 2	57.21	Dec. 2	b57.1	Nov. 15	58.72
Nov. 12	57.02	17	b57.0	Dec. 14	57.8
Dec. 23	56.86	Jan. 1, 1947	b56.9	Jan. 24, 1950	57.5
Jan. 27, 1932	56.76	21	57.0	Feb. 15	57.6
Feb. 23	56.74	Feb. 4	56.9	Mar. 15	57.5
Mar. 23	56.80	19	56.9	Apr. 19	58.4
Apr. 21	56.80	Mar. 4	56.9	May 4	57.75
June 1	57.05	18	57.0	June 15	58.9
Dec. 8	57.08	Apr. 8	57.1	July 12	58.8
Jan. 21, 1935	57.46	30	57.1	Aug. 15	58.9
Nov. 12	57.65	May 13	57.1	Sept. 14	59.3
Mar. 26, 1936	57.45	20	57.2	Oct. 17	58.5
Jan. 14, 1937	57.40	26	57.1	Nov. 2	58.40
June 21	57.70	June 9	57.1	Dec. 13	58.0
Dec. 8	57.60	24	57.3	Jan. 16, 1951	58.2
June 7, 1938	57.00	July 8	57.4	Feb. 14	56.7
Oct. 4	57.02	22	57.5	Mar. 20	57.6
May 24, 1939	56.75	Aug. 7	57.7	Apr. 18	58.06
Nov. 25	57.11	Sept. 4	57.3	May 4	57.87
May 8, 1940	56.80	Oct. 14	57.2	June 14	59.05
Nov. 26, 1940	57.27	Nov. 12	57.6	July 18	59.20
June 12, 1941	55.93	18	57.55	Aug. 15	58.97
Nov. 13	56.86	29	57.0	Sept. 13	59.77
May 7, 1942	56.65	Dec. 11	56.9	Oct. 16	58.82
Nov. 27	56.92	Jan. 7, 1948	57.3	Nov. 27	58.62
May 13, 1943	56.77	Feb. 16	57.3	Dec. 13	58.87
Dec. 22	56.94	Mar. 11	57.4	Jan. 22, 1952	57.96
Apr. 21, 1944	56.74	Apr. 15	57.91	Feb. 14	57.86
May 4, 1945	56.76	May 14	57.91	Mar. 13	57.89
Nov. 27	57.04	June 14	58.4	Apr. 10	58.66
Apr. 25, 1946	56.88	July 13	59.0	May 29	59.49
July 29	b57.1	Aug. 10	58.8	June 12	62.29
Aug. 7	b57.2	Sept. 14	58.5	July 16	59.76
20	b57.4	Oct. 13	60.3	Aug. 21	59.80
29	b57.3	Nov. 18	57.92	Sept. 18	59.57
Sept. 5	b57.3	Dec. 9	57.7	Oct. 16	59.40

Continued

7/4-30C1.--Continued

Date	Water level	Date	Water level	Date	Water level
Nov. 25, 1952	58.69	May 13, 1954	58.50	Feb. 6, 1957	58.92
Dec. 16	61.12	Nov. 16	59.30	Mar. 6	58.83
Jan. 16, 1953	60.24	Apr. 15, 1955	58.98	Apr. 3	60.00
Feb. 17	60.81	Sept.15	59.28	10	58.92
Mar. 17	58.13	Dec. 9	58.89	May 1	60.17
Apr. 14	58.26	Mar. 29, 1956	58.68	June 3	59.86
May 26	58.90	Nov. 5	66.10	Mar. 25, 1958	a58.95
Nov. 12	60.10	Dec. 5	59.42	Apr. 10	a58.92
Mar. 29, 1954	58.10	Jan. 2, 1957	59.21		

7/5-22N1 (M-7c). Depth 88.2 feet. Altitude about 2,715 feet. Records available: 1950-56, 1958. Records furnished: 1950, 1953-55, BR; 1956, F; 1958, GS.

Oct. 27, 1950	dry	Nov. 15, 1954	98.00	Apr. 3, 1956	dry
Nov. 5, 1953	89.70	Apr. 11, 1955	98.25	Feb. 26, 1958	dry
May 10, 1954	100.45	Dec. 5	94.70		

7/5-22N2 (M-7ca, alternate). Altitude about 2,715 feet. Records available: 1956-58. Records furnished: 1956-57, F; 1958, GS

Apr. 3, 1956	103.20	Apr. 29, 1957	99.39	Apr. 7, 1958	95.98
Dec. 17	100.15	Feb. 26, 1958	96.92		

7/5-22R1 (M-7b). Depth 127.5 feet. Altitude 2,710.4 feet. Records available: 1950, 1953-58. Records furnished: 1950, BR; 1953-58, F, except as indicated.

Oct. 27, 1950	105.5	Apr. 11, 1955	109.15	Apr. 29, 1957	108.46
Nov. 15, 1953	105.15	Dec. 5	107.70	Feb. 26, 1958	dry[a]
May 10, 1954	106.70	Apr. 3, 1956	a105.40	Apr. 7	a106.76
Nov. 15	105.60	Dec. 17	105.3		

7/5-26B1 (M-7a, CDE-279). Formerly A. Edwards. Altitude 2,737.0 feet. Records available: 1918, 1950, 1953-58. Records furnished: 1918, GS; 1950, BR; 1953-58, F, except as indicated.

Feb. 18, 1918	d171.0	Nov. 15, 1954	170.50	Dec. 17, 1956	169.57
Oct. 27, 1950	168.6	Apr. 11, 1955	168.80	Apr. 29, 1957	169.19
Nov. 5, 1953	169.0	Dec. 5	171.0	Feb. 28, 1958	a169.02
May 10, 1954	173.2	Apr. 3, 1956	a168.80	Apr. 7, 1958	a168.67

a. Measurement by Geological Survey.
b. Measurement by U. S. Bureau of Reclamation.
d. Measurement by California Department of Engineering.

8/4-20N1 (M-22). R. Fotia, formerly Lord. Depth about 50 feet. Altitude about 2,410 feet. Records available: 1930-32, 1934-47, 1951-58. Records from Geological Survey water-supply papers or from F, except as indicated.

Date	Water level	Date	Water level	Date	Water level
Dec. 13, 1930	12.0	Oct. 4, 1938	c13.58	Apr. 30, 1946	12.97
Mar. 26, 1931	11.49	May 24, 1939	12.40	Jan. 8, 1947	13.5
Oct. 2	12.45	Nov. 24	13.74	Nov. 27, 1951	18.60
Nov. 5	12.25	May 24, 1940	12.82	Nov. 25, 1952	18.74
Jan. 13, 1932	11.52	Nov. 26	14.81	May 26, 1953	18.93
Mar. 8	11.01	June 12, 1941	12.95	Nov. 12	21.60
May 26	11.06	Nov. 25	13.87	May 13, 1954	21.70
Jan. 10, 1934	11.47	May 7, 1942	11.85	Nov. 17	20.30
Jan. 21, 1935	11.49	Nov. 27	14.13	Apr. 13, 1955	23.50
Nov. 12	12.48	May 14, 1943	12.62	Dec. 9	27.24
Mar. 26, 1936	11.80	Dec. 13	13.84	Mar. 29, 1956	26.96
Jan. 15, 1937	12.47	Apr. 21, 1944	12.61	Dec. 20	26.96
Dec. 8	13.15	Dec. 13	13.97	May 1, 1957	27.20
June 2, 1938	12.30	May 4, 1945	13.11	Mar. 25, 1958	a24.43

8/4-31D1 (M-19). Frank Delfino, formerly Smith, formerly F. H. Merrell. Depth about 89 feet. Altitude 2,464.6 feet. Records available: 1930-32, 1939-58. Records from U. S. Geological Survey water-supply papers or from F, except as indicated.

Sept. 10, 1930	43.97	Apr. 25, 1946	43.59	Mar. 18, 1947	b43.7
Dec. 13	44.03	July 29	b43.8	Apr. 8	b43.6
Mar. 19, 1931	43.50	Aug. 7	b43.7	30	b43.7
May 20	43.79	21	b43.9	May 13	b43.6
Aug. 5	43.88	29	b44.0	20	b43.6
Nov. 5	43.90	Sept. 5	b44.0	26	b43.6
Jan. 7, 1932	43.65	16	b44.3	June 9	b43.6
Mar. 4	43.32	23	b44.2	24	b43.6
May 26	43.10	30	b44.1	July 8	b43.7
July 6	43.35	Oct. 6	b44.2	22	b43.8
Dec. 8	43.64	Oct. 15	b44.3	Aug. 7	b43.8
Nov. 25, 1939	44.00	21	b44.8	Sept. 4	43.9
May 24, 1940	43.40	28	b44.2	Oct. 14	44.1
June 12, 1941	43.40	Nov. 6	b44.3	Nov. 12	44.3
Nov. 25	46.94	18	b44.3	Dec. 11	44.2
May 7, 1942	43.15	25	b45.0	Feb. 16, 1948	43.9
Nov. 27	44.11	Dec. 2	b44.2	Mar. 11	43.9
May 14, 1943	43.38	17	b44.2	Apr. 15	43.7
Dec. 31	44.07	Jan. 1, 1947	b44.2	May 14	46.30
Apr. 21, 1944	43.56	21	b44.0	June 14	47.8
Dec. 13	44.17	Feb. 4	b43.8	July 13	45.8
May 4, 1945	43.57	19	b44.1	Aug. 10	41.5
Nov. 27	44.21	Mar. 4	b43.8	Sept.14	39.3

Continued

8/4-31D1.--Continued

Date	Water level	Date	Water level	Date	Water level
Oct. 13, 1948	39.4	Nov. 7, 1950	48.6	July 16, 1952	c59.53
Nov. 18	42.19	Dec. 13	47.1	Aug. 21	50.7
Dec. 9	43.0	Jan. 16, 1951	46.7	Sept.18	46.46
Feb. 17, 1949	43.9	Feb. 14	46.3	Oct. 16	48.79
Mar. 16	44.0	Mar. 20	46.0	Nov. 25	48.94
Apr. 14	46.3	Apr. 18	45.49	Dec. 16	51.5
May 9	44.29	May 16	46.27	Jan. 16, 1953	49.10
Sept.15	46.3	June 14	45.09	Feb. 18	52.83
Oct. 19	51.6	July 18	46.87	Mar. 12	56.84
Nov. 15	48.76	Aug. 15	46.53	17	55.54
Dec. 14	47.4	Sept.13	46.42	Nov. 12	57.30
Jan. 24, 1950	47.0	Oct. 16	46.32	May 13, 1954	60.60
Feb. 15	46.6	Nov. 27	46.22	Nov. 17	58.30
Mar. 15	46.6	Dec. 13	46.11	Apr. 13, 1955	56.44
Apr. 19	46.8	Jan. 22, 1952	45.77	Dec. 9	55.20
June 15	47.3	Feb. 14	45.54	Mar. 29, 1956	54.34
July 12	49.2	Mar. 13	44.38	Dec. 20	58.26
Aug. 15	48.5	Apr. 10	45.84	May 1, 1957	58.87
Sept.14	46.8	May 29	47.74	June 5, 1958	a56.96
Oct. 17	47.5	June 12	47.27		

8/4-31R1 (M-15). Fred Orebaugh, formerly Bleedsaw, formerly Carl McNew. Depth about 60 feet. Altitude about 2,450 feet. Records available: 1930-32, 1934-56, 1958. Records from U. S. Geological Survey water-supply papers or from F, except as indicated.

Sept. 5, 1930	16.87	Oct. 4, 1938	16.01	Sept. 5, 1946	16.6
Dec. 13	15.00	May 24, 1939	15.28	16	16.6
Mar. 20, 1931	14.48	Nov. 25	15.71	23	16.7
May 20	14.82	May 24, 1940	15.92	30	16.7
Aug. 4	15.87	Nov. 26	16.35	Oct. 6	16.6
Oct. 2	15.97	June 12, 1941	15.37	15	16.6
Nov. 5	15.42	Nov. 13	15.48	21	16.4
Jan. 7, 1932	14.76	May 7, 1942	14.63	28	16.3
Feb. 23	14.40	Nov. 27	15.52	Nov. 6	16.1
Mar. 23	14.37	May 13, 1943	14.81	18	15.8
June 23	14.97	Dec. 22	15.18	Nov. 25	15.7
Sept. 7	16.07	Apr. 21, 1944	14.63	Dec. 2	15.7
Jan. 10, 1934	15.05	Dec. 13	15.29	17	15.5
Jan. 21, 1935	15.05	May 4, 1945	15.03	Jan. 1, 1947	15.3
Nov. 12	16.24	Nov. 27	15.57	21	15.2
Mar. 26, 1936	15.02	Apr. 25, 1946	14.10	Feb. 4	15.1
Jan. 14, 1937	15.41	July 29	16.1	19	15.1
June 21	15.42	Aug. 7	16.3	Mar. 5	15.0
Dec. 8	15.88	20	16.6	18	15.0
June 7, 1938	15.20	29	16.5	Apr. 8	15.0

Continued

8/4-31R1.--Continued

Date	Water level	Date	Water level	Date	Water level
Apr. 30, 1947	15.1	Jan. 17, 1949	15.9	Nov. 27, 1951	17.30
May 13	15.2	Feb. 17	16.5	Dec. 13	17.89
20	15.4	Apr. 14	15.4	Jan. 22, 1952	16.61
26	15.4	June 16	17.2	Feb. 14	16.59
June 9	15.5	July 14	18.0	Mar. 13	16.35
24	15.7	Aug. 18	18.6	May 29	17.86
July 8	16.0	Sept.15	19.0	June 12	17.15
22	16.2	Oct. 19	19.0	July 16	17.99
Aug. 7	16.4	Dec. 14	17.7	Aug. 21	18.95
Sept. 4	16.7	Jan. 24, 1950	17.0	Sept.18	19.45
Oct. 14	16.7	Feb. 15	16.8	Oct. 16	19.65
Nov. 12	16.4	Mar. 15	16.6	Nov. 25	18.12
Dec. 11	15.7	Apr. 19	17.9	Dec. 16	20.16
Jan. 7, 1948	15.5	May 4	16.07	Jan. 16, 1953	17.29
Feb. 16	15.5	July 12	17.85	Feb. 17	18.03
Mar. 11	15.1	Sept.14	18.45	May 26	18.54
Apr. 15	15.4	Oct. 17	18.85	Nov. 12	21.07
May 14	15.48	Nov. 7	17.95	May 13, 1954	18.82
June 14	16.5	Dec. 13	17.80	Nov. 17	22.32
July 13	16.7	Jan. 16, 1951	16.95	Dec. 9, 1955	22.94
Aug. 10	17.3	Feb. 14	16.65	Apr. 12, 1956	19.27
Sept.14	17.8	Apr. 18	16.41	Dec. 20	10.14
Oct. 13	17.9	May 4	15.64	Mar. 25, 1958	a19.97
Nov. 18	16.69	July 18	18.08		
Dec. 9	16.4	Oct. 16	18.72		

8/6-14Q1. Elizabeth Astley. Depth about 310 feet. Altitude 2,760.4 feet. Records available: 1953-58. Records furnished: F, except as indicated.

May 1, 1953	a191.17	Apr. 11, 1955	182.62	Apr. 29, 1957	219.90
Nov. 5	169	Dec. 5	196.42	Apr. 7, 1958	a193.68
May 10, 1954	208.27	Apr. 3, 1956	a195.72	Aug. 26	dry e/
Nov. 15	206.82	Dec. 17	173.92		

10/6-5E3 (F-5F1). Darr and Caillier. Depth about 440 feet. Altitude about 2,470 feet. Records available: 1953-58. Records furnished: F

Nov. 12, 1953	214.50	Apr. 14, 1955	198.30	Dec. 20, 1956	195.55
May 13, 1954	221.30	Dec. 12	203.70	May 2, 1957	249.66
Nov. 17	213.50	Mar. 29, 1956	197.40	Mar. 25, 1958	204.20

11/6-31R1. Wilk. Altitude about 2,455 feet. Records available: 1955-58. Records furnished: GS.

Date	Water level	Date	Water level	Date	Water level
Sept. 30, 1955	186.66	Mar. 5, 1957	180.88	Aug. 25, 1958	196.78
Mar. 23, 1956	184.57	Nov. 6	c200+		
Oct. 30	181.11	Mar. 10, 1958	180.16		

a. Measurement by Geological Survey.
b. Measurement by U. S. Bureau of Reclamation.
c. Pumping.
d. Measurement by California Department of Engineering.
e. Obstruction at 230 feet.

Table 6.--Drillers' logs of wells

Note: The term kaolin (also spelled koalin, kaoline, kalein, kalene, etc.) is used by some drillers in the Middle Mojave Valley area to describe a hard white calcareous clay commonly containing small solution channels that cause the material to be moderately water bearing.

6/4-6C1. Joe Villareal. Altitude about 2,630 feet. Drilled by David Engel in 1957. 8-inch casing, perforated from 100 to 145 feet.

Material	Thickness (feet)	Depth (feet)
Sand	38	38
Clay	3	41
Boulders	8	49
"Hardpan"	6	55
Boulders	12	67
Sand	8	75
Sandy clay	15	90
Clay	13	103
Fine sand	3	106
Gravel clay	9	115
Sand	10	125
Clay	2	127
Sand streaked with clay	16	143
Clay	2	145

6/4-6D6. J. P. Blankenship. Altitude about 2,600 feet. Drilled by David Engel in 1955. 8-inch casing, perforated from 94 to 127 feet.

Sand	4	4
"Hardpan"	6	10
Sand	15	25
"Hardpan"	6	31
Boulders	13	44
Clay gravel	26	70
Clay, sand	8	78
Sand (water)	14	92
Clay	11	103
Sand (water)	24	127
Clay	2	129

6/4-6D10. Wayne Murry. Altitude about 2,580 feet. Drilled by McDougall Well Drilling Co. in 1947. 8-inch casing to 100 feet, perforated from 70 to 100 feet.

Coarse dry sand	18	18
Boulders and clay	9	27
Water-bearing sand	4	31
Sandy clay	13	44
Fine water-bearing sand	4	48
Clay	27	75
Fine sand	17	92
Clay	3	95
Sand	20	115

6/4-6E4. H. H. White. Altitude about 2,620 feet. Drilled by C. C. Lackyard in 1947. 6-inch casing, perforated from 235 to 265 feet.

Material	Thickness (feet)	Depth (feet)
Loose rocks and gravel (same as surface)	30	30
Cemented conglomerate with large boulders	14	44
Brown sand-clay	19	63
Rocks and sand (hard)	3	66
Sandy clay	11	77
Cemented conglomerate (hard)	9	86
Sandy clay and some rocks	32	118
Brown clay	38	156
Clay with 6-inch beds of rock	9	165
Hard brown sand	15	180
Hard sandy clay with 6-inch streaks of rock as much as 4 feet apart	18	198
"Gumbo" (brown and white clay)	27	225
Water gravel	21	246
Blue clay	19	265

6/4-6E6. R. D. Workman. Altitude about 2,580 feet. Drilled by C. C. Lackyard in 1947. 6-inch casing zero to 104 feet, perforated from 60 to 100 feet.

Same as surface	10	10
Cemented conglomerate	31	41
Clay	11	52
Water in sandy clay	3	55
Clay	5	60
Water gravel	5	65
Clay with hard sand and 1- to 12-inch boulders	5	70
Water gravel	10	80
Clay	6	86
Water gravel	10	96
Fine sandy clay	8	104

6/4-18F2. J. G. Ivy. Altitude about 2,610 feet. Drilled by Baldy Mesa Well Drillers in 1950. 6-inch casing, perforated from 96 to 120 feet.

Surface sand and black loam	22	22
Surface water	7	29
Boulder	3	32
Cemented brown sand	19	51
Brown sand and clay, thin streaks of water	9	60
Cemented conglomerate	2	62
Brown clay	14	76
Water gravel	6	82
Brown clay	3	85
Water gravel	7	92
Cemented sand	11	103
Loose packed gravel and rocks, water	17	120

6/4-18P1. Riverside Cement Co., well 53-1. Altitude about 2,610 feet. Drilled by H. H. Ley in 1953. 14-inch casing, perforated 25 to 75 feet.

Material	Thickness (feet)	Depth (feet)
Soil	3	3
Fine white sand	3	6
Silty soil	6	12
Coarse sand and gravel to 3/4 inch	28	40
Gravel, sand and 3-inch rock	21	61
Sand, gravel and rock to 10 inches	9	70
Green clay	3	73
Yellow clay	5	78

6/4-18P2. Riverside Cement Co., well 52-1. Altitude about 2,610 feet. Drilled by H. H. Ley in 1952. 14-inch casing, perforated from 23 to 73 feet.

Soil, black silt, and fine sand	8	8
Black "swamp" mud and silt	10	18
Coarse gray sand, 5 percent 3/4-inch gravel, 10 percent black silt	9	27
Organic matter, vegetation	1	28
Coarse gray sand, 10 percent black silt	9	37
Coarse gray sand, 20 percent 3/4-inch gravel	31	68
Coarse gray sand, 20 percent 3/4-inch gravel, and rock to 8-inch diameter	5	73
Tough yellow clay, as on hillside	4	77

6/4-19A2. Riverside Cement Co., well 52-2. Altitude about 2,650 feet. Drilled by H. H. Ley in 1952. 12-inch casing, perforated from 40 to 118 feet.

Soil, sandy clay	18	18
Tough yellow clay	4	22
Coarse sand and gravel, few 4-inch rocks	16	38
"Bright" water sand, 50 percent coarse, 50 percent fine	12	50
Same as above, but firm	3	53
Tough yellow clay	10	63
Sand, rock and gravel, water	2	65
Yellow sandy clay	2	67
Dirty fine sand and $\frac{1}{4}$-inch gravel, small amount of water	1	68
Yellow sandy clay	7	75
Sand, gravel, and rock	2	77
Tough yellow clay	3	80
Conglomerate, sharp rock, clay and lime streaks	7	87
Blue clay	3	90
Decomposed granite, as on hillside	26	116
Loose rock, some 3/4-inch river-washed gravel	2	118
Granite boulders impounded in "hillside calechi." Very hard and difficult to drill	3	121

6/4-19A3. Oro Grande Grammar School. Altitude about 2,670 feet. Drilled by J. S. Gobar in 1951. 10-inch casing.

Material	Thickness (feet)	Depth (feet)
Soil and some rock	20	20
Rocks	7	27
Decomposed granite-type soil	21	48
Decomposed granite-type soil, with rocks	18	66
Very good gravel	6	72
Decomposed granite with clay	6	78
Gravel and "cement"	28	106
Decomposed granite and clay	8	114

6/4-19B2. T. H. Wobermin. Altitude about 2,630 feet. Drilled by Everett Reed in 1956. 8-inch casing.

Dirt	26	26
Black clay	8	34
Gravel, to 12 inches	4	38
Rusty brown clay	20	58
Clay cemented sand	124	182
Rocks, 6 inches	3	185
"Sandstone"	11	196
Gravel,clay cemented	6	202
Rocks cemented in clay	4	206
Sand, clay cemented	10	216
Gravel, clay cemented	4	220

6/4-19E1. Riverside Cement Co., well 54-4. Altitude about 2,613 feet. Drilled by Roscoe Moss Co. in 1954. 16-inch casing, perforated from 20 to 88 feet.

Sand and gravel	27	27
Clay, sandy clay	6	33
Layers of gray clay and sand	7	40
Packed silt	3	43
Gray sand and gravel	22	65
Sandy clay and gravel	35	100

6/4-19F1. Riverside Cement Co., well 54-1. Altitude about 2,619 feet. Drilled by Roscoe Moss Co. in 1954. 16-inch casing, zero to 97 feet, perforated from 20 to 88 feet.

Material	Thickness (feet)	Depth (feet)
Sand	4	4
Clay	1	5
Sand	2½	7½
Clay	½	8
Sand	5	13
Clay, silt, and fine sand	3	16
Fine gray sand and small gravel	12	28
Sand, gravel to 3 inches, layers of clay	7	35
Tight gravel to 8 inches	9	44
Boulders	9	53
Gray sandy clay	5	58
Clay and packed sand	7	65
Gray sandy clay	11	76
Brown sandy clay, embedded gravel	24	100

6/4-19H1. H. H. Ley. Altitude about 2,640 feet. Drilled by owner in 1955. 14-inch casing, perforated from 24 to 40 feet.

Soil	8	8
Sand, clay, 3/4-inch sharp rock	13	21
Sandy clay	9	30
Sand, gravel, and 4-inch rocks	4	34
Sand, gravel, rock, and clay ribs	7	41

6/4-19P1. Riverside Cement Co., well 54-5. Altitude about 2,622 feet. Drilled by Roscoe Moss Co., in 1954. 16-inch casing, perforated from 20 to 88 feet.

Gray silty clay	5	5
Gray silt and sand	3	8
Gray sand	7	15
Brown sand, to 3-inch gravel	8	23
Gray silty clay	13	36
Brown and gray sand	10	46
Gray sand to 8-inch gravel (tight)	7	53
Gray clay	2	55
Brown clay and embedded gravel	29	84
Tight sand to 3-inch gravel	3	87
Brown sandy clay and embedded gravel	13	100

6/4-20M2. T. J. McLaughlin. Altitude about 2,680 feet. Drilled by C. C. Lackyard in 1947. 6-inch casing, zero to 72 feet, perforated from 50 to 70 feet.

Surface	10	10
Sandy clay	30	40
Cemented conglomerate	5	45
Hard gray sand	10	55
Water gravel (dry)	1	56
Cemented conglomerates	4	60
Granite (out of place)	12	72

6/4-20M3. J. A. Williams. Altitude about 2,690 feet. Drilled by Jess Newman in 1949. 6-inch casing.

Material	Thickness (feet)	Depth (feet)
Loose mountain-float gravel	60	60
Cemented sand	10	70
Coarse, hard-packed gravel	6	76
Bedrock		

6/4-20M7. B. Cuddy and H. McKeen. Altitude about 2,710 feet. Drilled by Jess Newman in 1947. 6-inch casing.

Granite float	42	42
Hard sand and some gravel	10	52
Loose gravel and clay	15	67
Packed hard white sand	13	80
Sandstone	12	92
Loose coarse granite sand in water	20	112

6/4-29M6. Riverside Cement Co., well 54-2. Altitude about 2,647 feet. Drilled by Roscoe Moss Co. in 1954. 16-inch casing zero to 74 feet, perforated from 20 to 64 feet.

Sand and small gravel	22	22
Sand and gravel to 3 inches	10	32
Gray sandy clay	6	38
Sand to 8-inch gravel, layers of clay	7	45
Tight sand to 4-inch gravel	23	68
Clay and granite boulders	31	99

6/4-29M7. Riverside Cement Co., well 54-3. Altitude about 2,649 feet. Drilled by Roscoe Moss Co. in 1954. 16-inch casing zero to 53 feet, perforated from 20 to 40 feet.

Sand	2	2
Silt	2	4
Sand	5	9
Silt, sand, and gravel	7	16
Gray silt, sand, and gravel	10	26
Brown silt, sand, and gravel	8	34
Tight gray sand	3	37
Gray clay and gravel to 8 inches	11	48
Clay and boulders	10	58

6/4-29-2. Victorville Military Airport, well 1. Altitude about 2,750 feet. Drilled by Roscoe Moss Co. in 1941. 16-inch casing, perforated 50 to 88 feet.

Material	Thickness (feet)	Depth (feet)
Sand and silt	12	12
Brown coarse sand (water)	8	20
Gray coarse sand	5	25
Gray clay sand, some gravel	11	36
Gray clay and coarse sand	4	40
Gray clay, sand 95 percent, gravel 4 percent to 4 inches	2	42
Gray sand and gravel, 80 percent to 7 inches	3	45
Gray sand and clay	6	51
Gray coarse sand and gravel to 4 inches	9	60
Gray coarse sand	8	68
Gray sand 75 percent and gravel to 4 inches	2	70
Brown sand and gravel 80 percent to 10 inches	19	89
Gray sandy clay	11	100

6/4-29-3. Victorville Military Airport, well 3. Altitude about 2,660 feet. Drilled by Roscoe Moss Co. in 1942. 16-inch casing, perforated 43 to 88 feet.

Gray clay	8	8
Fine to coarse clay	5	13
Gray sandy clay	28	41
Water sand to 3-inch gravel	2	43
Gray clay	1	44
Water sand to 2-inch gravel	3	47
Gray sandy clay	1	48
Water sand and gravel layers	6	54
Water gravel to 4 inches	19	73
Brown clay, embedded gravel	4	77
Brown sandy clay	23	100

6/4-30G1. George Air Force Base, well 5. Altitude about 2,650 feet. 16-inch casing.

Topsoil, sand	10	10
Fine sand	10	20
Sand and boulders	20	40
Water sand	20	60
Water sand and boulders	21	81
Brownish clay	19	100

6/4-30K2. George Air Force Base, well 4. Altitude about 2,650 feet. Drilled by Roscoe Moss Co. in 1943. 16-inch casing, zero to 91 feet, perforated from 30 to 78 feet.

Material	Thickness (feet)	Depth (feet)
Sandy silt	14	14
Fine gray sand	4	18
Coarse brown sand	17	35
Fine dark sand	2	37
Fine dark sand and gravel to 3 inches	8	45
Gray sand, some gravel	15	60
Fine gray muddy sand	6	66
Brown sand, gravel, and boulders	12	78
Brown sandy clay	20	98

6/4-30P2. Adelanto Community Service District. Altitude about 2,650 feet. 16-inch casing.

Soil	15	15
Sand	8	23
Gravel	10	33
Sand	10	43

6/4-30-2.. Victorville Military Airport, well 2. Altitude about 2,645 feet. Drilled by Roscoe Moss Co. in 1942. 26-inch casing, not perforated. Casing pulled.

Gray clay	5	5
Gray and brown silt	9	14
Fine to coarse gray sand	9	23
Sand to 3-inch gravel (rounded)	9	32
Brown clay	10	42
Fine to coarse sand	1	43
Brown sandy clay	4	47
Brown clay	53	100

6/4-32G1. Donald Doran. Altitude about 2,750 feet. Drilled by H. H. Ley in 1955. 10-inch casing, perforated from 44 to 64 feet.

Soil	6	6
Coarse sand	4	10
Tough yellow clay	14	24
Coarse sand	2	26
Sandy yellow clay	19	45
Decomposed granite (loose)	20	65
Bedrock	3	68

6/4-32G2. Donald Doran. Altitude about 2,760 feet. Drilled by H. H. Ley in 1956. 10-inch casing, perforated from 61 to 81 feet.

Soil and clay	65	65
Decomposed granite	16	81
Granite (open hole)	24	105

6/4-32N1. Riverside Cement Co., well 52-5. Altitude about 2,765 feet. Drilled by H. H. Ley in 1952. 10-inch casing, perforated from 144 to 174 feet.

Material	Thickness (feet)	Depth (feet)
Soil	3	3
Sandy clay	35	38
Clean sand, medium coarse (water)	1	39
Sandy yellow clay (tough)	19	58
Coarse clean sand (water)	1	59
Coarse sand and clay ribs (water)	5	64
Tough yellow clay	2	66
Coarse sand and clay ribs (water)	9	75
Tough yellow clay	5	80
Coarse bright sand (water)	2	82
Yellow sandy clay	3	85
Tough yellow clay	2	87
Loose clean sand	1	88
Hard cemented sand	1	89
Tough yellow clay	8	97
Green clay	3	100
Yellow clay	37	137
Coarse sand, 10 percent $\frac{1}{4}$-inch gravel (water)	2	139
Tough yellow clay	43	182
Coarse gray decomposed granite, hard and difficult to drill	11	193
Solid rock, granite		

6/4-33P2. Southwest Portland Cement Co., well 7. Altitude 2,685.4 feet. Drilled by Baldy Mesa Well Drillers in 1950. 12-inch casing, perforated from 18 to 36 feet, 54 to 108 feet, and 126 to 144 feet.

Silt and brown sandy clay	15	15
Brown medium gravel (surface water)	18	33
Hard cemented brown sand, niggerhead boulders	7	40
Cemented brown sand	18	58
Loose conglomerate brittle brown sandy clay (water)	13	71
Brown sandy clay	12	83
Brittle conglomerate (water)	19	102
Cemented sand (narrow steady water)	15	117
Hard cemented sand and niggerhead	26	143
Brittle conglomerate (water)	8	151

6/4-33R1. C. L. Abbey. Altitude about 2,700 feet. Drilled by McDougall Well Drilling Co. in 1950. 14-inch casing to 103 feet, 12-inch casing 103 to 262 feet, perforated: 156 to 160, 176 to 188, 212 to 215, and 232 to 252 feet.

Material	Thickness (feet)	Depth (feet)
Sandy loam	4	4
Rocky sandy clay	12	16
Brown sandy clay	7	23
Fine light gray sand	2	25
Water sand, coarse light-gray gravel	43	68
Good coarse water sand and small gravel with some thin layers of sandy clay	31	99
Sand (too fine to perforate)	4	103
Fine sand	3	106
Coarse sand and small gravel	14	120
Coarse sand, large gravel and boulders	14	134
Soft sandy light-brown clay	22	156
Large gravel and boulders	4	160
Brown sandy clay	16	176
Coarse sand, small gravel	12	188
Brown sandy clay	24	212
Coarse sand, small rocks	3	215
Sandy clay	17	232
Coarse sand, small gravel	20	252
Brown sandy clay	10	262

6/5-4N1. Walter Bros. turkey ranch. Altitude about 2,765 feet. Drilled by David Engel in 1956. 8-inch casing, perforated from 71 to 101 feet.

Sand	1	1
"Claeche"	4	5
Sand	10	15
Clay	5	20
Sand	10	30
Sand and clay	12	42
Clay and sand	15	57
Hard sand	15	72
Hard sand and clay	16	88
Sandstone	3	91
Sand (water)	8	99
Clay	5	104

6/5-6P2. Elmer Conder. Altitude about 2,760 feet. Drilled by David Engel in 1956. 8-inch casing, perforated from 45 to 80 feet.

Material	Thickness (feet)	Depth (feet)
Sand	1	1
"Claechi"	3	4
Clay-sand	11	15
Sand	5	20
Sand-clay	25	45
Hard sand	9	54
Sand (water)	5	59
Clay	6	65
Gravel-sand	7	72
Clay	8	80

6/5-8D1. Burton and Blake. Altitude about 2,770 feet. Drilled by L. F. McFadden in 1951. 8-inch casing, perforated from 61 to 94 feet.

Top formation	8	8
Sand and clay	42	50
Hard clay and sand	13	63
Clay and sand	13	76
Sand	17	93
Clay	3	96

6/5-9B1. L. L. Shelton. Altitude about 2,780 feet. Drilled by David Engel in 1955. 8-inch casing, perforated from 97 to 133 feet.

Sand	1	1
"Claecha"	3	4
Clay-sand	16	20
Sand	8	28
Sand-clay	64	92
Hard sand	5	97
Sand	13	110
Clay	4	114
Sand	7	121
Clay	12	133

6/5-28-2 (CDE-202). E. H. Richardson. Altitude 2,879.5 feet. 12-inch casing.

Soil, sand, and clay	114	114
Water sand	46	160
Clay	63	223
Sandy clay	12	235
Cemented clay	45	280
Sandy clay	23	303
Cemented clay	15	318
Cemented sand	22	340
Cemented clay	22	362

Continued

6/5-28-2.--Continued

Material	Thickness (feet)	Depth (feet)
Sandy clay	10	372
Cemented sand	15	387
Cemented clay	49	436
Water sand	62	498
Clay	11	509
Water sand	6	515
Clay	22	537
Water sand	18	555
Cemented clay	28	583
Water sand	6	589
Clay	6	595

7/4-6L4. M. K. Lewis. Altitude about 2,455 feet. Drilled by Ephraim Harris in 1951. 16-inch casing, perforated from 51 to 107 feet.

Surface soil	8	8
Sand	4	12
Dirty sand	15	27
Clean coarse sand and heavy gravel. Bottom of Mojave River fill	11	38
Bright gray sandy clay	22	60
Sand and gravel	3	63
Buff clay	2	65
Fine sand and gravel	13	78
Buff clay	2	80
Coarse sand and gravel	7	87
Buff clay	4	91
Sand and gravel	8	99
Buff clay	3	102
Sand and gravel with clay bottom	5	107

7/4-6R1. J. Leckwark. Altitude about 2,485 feet. Drilled by McDougall Well Drilling Co. in 1947. 12-inch casing, perforated 43 to 63 feet.

Washed gravel, clay	12	12
Brown sand, clay	30	42
Fine sand, water-bearing	4	46
Coarse sand and small gravel	19	65

7/4-6R5. J. C. Tobin. Altitude about 2,470 feet. Drilled by J. M. Scoggin Drilling Co. in 1954. 8-inch casing, perforated from 18 to 36 feet.

Topsoil	5	5
Boulders	13	18
Gravel and large boulders	18	36

7/4-18D2. F. J. Harris. Altitude about 2,475 feet. Drilled by McDougall Well Drilling Co. in 1947. 12-inch casing, perforated 123 to 217 feet.

Material	Thickness (feet)	Depth (feet)
Sandy soil	9	9
Fine sand	8	17
Sand and gravel	8	25
Decomposed granite	2	27
Large gravel and sand	12	39
Light sandy clay	11	50
Fine sand	11	61
Light sandy clay	33	94
Fine sand, small gravel	17	111
Coarse sand, gravel	8	119
Fine sand, small gravel	5	124
Sandy clay	12	136
Coarse sand	10	146
Sandy clay	7	153
Coarse sand, some small gravel	62	215
Clay	2	217

7/4-18G1. W. E. Cole. Altitude about 2,520 feet. Drilled by J. S. Gobar in 1950. 10-inch casing, perforated from 75 to 85 feet and 90 to 95 feet.

Topsoil	8	8
Decomposed granite	30	38
Decomposed granite, well cemented	12	50
Cemented rock	8	58
Dirty gravel and rock	17	75
Good gravel	10	85
Brown clay	5	90
Gravel	10	100

7/4-19Q1. J. B. Hammond. Altitude about 2,600 feet. Drilled by Jess Newman in 1950. 6-inch casing, perforated from 128 to 136 feet.

"Mountain-float rock"	48	48
Gravel	22	70
Sand	11	81
"Mountain" clay	11	92
Mixed clay and gravel	8	100
Gravel with some sand	36	136

7/4-19Q2. M. L. Kinney. Altitude about 2,590 feet. Drilled by Jess Newman in 1951. 6-inch casing, perforated from 104 to 112 feet.

"Mountain-float" rock	60	60
Loose boulder formation	20	80
"Mountain" clay	10	90
Water gravel and coarse sand	22	112

7/4-31E1. A. C. Frisbee. Altitude about 2,560 feet. Drilled by Everett Reed in 1956. 8-inch casing.

Material	Thickness (feet)	Depth (feet)
Soil with a little gravel and a few 12-inch rocks	45	45
Loose 10-inch gravel	12	57
Gravel (up to 6 inches with clay cement)	24	81
Loose water gravel	3	84
Brown clay	6	90

7/4-31P1. William Hawson. Altitude about 2,615 feet. Drilled by J. S. Gobar in 1951. 6-inch casing, perforated from 97 to 127 feet.

Gravel (dry)	38	38
Rocks	24	62
Decomposed granite and clay-rock reefs	11	73
Dry sand	9	82
Decomposed granite and clay-rock reefs	10	92
Sandy rock reefs	34	126
Gravel (water)	5	131

7/5-24P1. H. H. Hill. Altitude about 2,505 feet. Drilled by H. H. Ley in 1951. 14-inch casing, perforated from 21 to 111 feet.

Soil and black silt	23	23
Coarse sand gravel and rock	17	40
Green clay	1	41
Coarse sand and gravel, some clay, condition firm	3	44
Gray sand, small amount of gravel, and some clay	2	46
Yellow clay	1	47
Gray sand, fine to coarse (50 percent of each)	5	52
Coarse sand, gravel, 2-inch rock; condition loose	9	61
Coarse sand, gravel, 2-inch rock, some clay	4	65
Coarse sand and gravel, condition good	7	72
Yellow clay	1	73
Coarse sand and gravel, some 2-inch rock	15	88
Coarse sand and gravel, rock to 4 inches, several thin clay ribs, condition clean and free	16	104
As above, no large rock	3	107
Coarse gray sand and gravel, loose	6	113
Open hole, sand and gravel, 25 percent clay	8	121

7/5-25A1. L. L. Weiss. Altitude about 2,515 feet. Drilled by J. S. Gobar. Perforated from 140 to 180 feet.

Material	Thickness (feet)	Depth (feet)
Quicksand	38	38
"Cement"	2	40
Clay	4	44
Dirty ground	13	57
Clay	10	67
Sandy clay	27	94
Decomposed granite, dirty	31	125
Clay, sandy	27	152
Soft clay	24	176
"Kaolin"	9	185
Clay	10	195

7/5-25A4. L. L. Weiss. Altitude about 2,510 feet. Drilled by J. S. Gobar in 1951. 8-inch casing, perforated 42 to 80 feet.

Topsoil	6	6
"Rusty" sand	2	8
Black muck	4	12
Brown clay	28	40
Gravel, small	16	56
Clay	2	58
Gravel	10	68
Clay	2	70
Gravel	8	78
Clay and gravel	11	89

7/5-25G2. L. L. Weiss. Altitude about 2,510 feet. Drilled by J. S. Gobar in 1952. 14-inch casing, perforated zero to 65 feet.

Top sand	2	2
Sand and silt	2	4
Sand	10	14
Blue and brown clay	4	18
Coarse sand	6	24
Sandy clay	12	36
Coarse sand	6	42
Brown clay	10	52
Sand and gravel	18	70
Brown clay	2	72

7/5-25G3. L. L. Weiss. Altitude about 2,510 feet. Drilled by J. S. Gobar in 1951. 12-inch casing.

Black topsoil	4	4
Good gravel	8	12
Sandy clay	18	30

7/5-25G4. L. L. Weiss. Altitude about 2,515 feet. Drilled by J. S. Gobar in 1950. 14-inch casing.

Material	Thickness (feet)	Depth (feet)
Topsoil	7	7
River sand	11	18
Gravel (good)	12	30
Boulders	17	47
Clay	10	57
"Dead" sand	1	58

7/5-25G6. L. L. Weiss. Altitude about 2,515 feet. Drilled by J. S. Gobar in 1951. 14-inch casing, perforated from 30 to 44 feet.

Topsoil	2	2
Sand	1	3
Black soil	5	8
"Quick" silt	4	12
Gravel	16	28
"Quick" silt	2	30
Gravel (cut)	12	42
Silt	6	48

7/5-25H1. R. M. Hillwig. Altitude about 2,520 feet. Drilled by J. S. Gobar in 1951. 14-inch casing, perforated from 24 to 40, 48 to 70, and 82 to 92 feet.

Topsoil	2	2
Sand	1	3
Black silt	7	10
Decomposed granite and rocks	4	14
Decomposed granite, clay	10	24
Gravel	16	40
Brown clay	8	48
Gravel	24	72
Clay	10	82
Gravel	10	92
Clay	4	96

7/5-25K4. A. Gysber. Altitude about 2,525 feet. Drilled by J. S. Gobar in 1928. 12-inch casing.

Sandy soil	8	8
Coarse sand	8	16
"Quicksand"	2	18
Sand	12	30
Gravel, boulders	13	43
Sandy clay	5	48
Good gravel	25	73
Sandy clay	2	75

7/5-25K5. A. Gysber. Altitude about 2,525 feet. Drilled by J. S. Gobar in 1951. 12-inch casing, perforated from 33 to 55 feet.

Material	Thickness (feet)	Depth (feet)
Topsoil	2	2
Sand	1	3
Black soil	5	8
Sand	20	28
Black sandy clay	2	30
Gravel, very good	18	48
Black sandy clay	1	49
Gravel	11	60

8/4-20K2. F. F. Abken. Altitude about 2,405 feet. 14-inch casing, perforated from 12 to 49 feet.

No log available (old dug hole)	27	27
Good gray gravel	9	36
"Decomposed granite" with clay	5	41
Gravel, good	8	49
Sandy clay	2	51
Gravel	5	56

8/4-30A2. Judge Volks, formerly G. E. Watkins. Altitude about 2,415 feet. Drilled by Scoggin Drilling and Development Co. in 1951. 20-inch casing, perforated from zero to 90 feet.

Topsoil	10	10
Fine sand and streaks of gravel	15	25
Water gravel and boulders	65	90

8/4-30F1. C. Smith, formerly G. E. Watkins. Altitude about 2,445 feet. Drilled by Scoggin Drilling and Development Co. in 1951. 14-inch casing, perforated from 90 to 364 feet.

Sandy soil	12	12
Gravel and boulders	73	85
Blue shale	5	90
Gravel and boulders	27	117
Blue shale	6	123
Gravel, large	62	185
Red shale	5	190
Gravel	27	217
Red shale	6	223
Gravel and boulders	132	355
Shale	9	364

8/4-32C2. Atchison, Topeka, and Santa Fe Ry. Altitude about 2,430 feet. Drilled by S. W. Burkhart in 1914. 12-inch casing in 1914, replaced by 10-inch casing in 1944.

Material	Thickness (feet)	Depth (feet)
Soil	18	18
Sand and gravel	10	28
Clay	22	50

8/5-7F1. U. S. Government, formerly Adelanto Development Corp., well G3. Altitude about 2,685 feet. Drilled in 1956. 11-inch casing to 100 feet and 7-inch casing to 2,500 feet, no perforations.

Sand, coarse grained	650	650
Sand, medium to fine grained	650	1,300
Shale, buff, silty, micaceous (cored)	30	1,330
White limy quartz and feldspar conglomerate (cored)	10	1,340
Tan micaceous siltstone (cored)	10	1,350
Sand, buff and gray to green shale	270	1,620
Buff, tan, and pink silty shale	50	1,670
Light gray very fine crystalline lime	20	1,690
Light gray-buff to brown shale, increase in sand	40	1,730
Shale as above; white crystalline lime, 40 percent quartz sand	70	1,800
Buff, tan, and green shale, streaks of sand	45	1,845
White crystalline lime and green and gray shale	41	1,886
Buff to brown, gray-green, and blue shale	10	1,896
Gray-green to brown shale (cored)	19	1,915
Gray-green lime (cored)	15	1,930
Blue calcareous shale (cored)	10	1,940
Gray-green to blue waxy shale (cored)	10	1,950
Gray to green shale, and thin gray limy shale	10	1,960
Green to gray-green shale	10	1,970
Olive-green to brown shale	5	1,975
Tan to blue shale	10	1,985
Green, gray, and brown shale	10	1,995
Brown to green micaceous shale (cored from 1,995 to 2,150 feet)	10	2,005
Gray-green to blue-green limy shale	10	2,015
Gray-green slicken-sided shale	10	2,025
Green to blue shale	10	2,035
Gray-green limy shale	10	2,045
Gray-green limy siltstone, 4- and 3-foot white chalky lime	10	2,055
Gray-green siltstone	5	2,060
Gray-green limy shale and 5-foot olive-green limy siltstone	6	2,066
Gray-green to gray sandy shale and siltstone, slightly calcareous, has a 45° bedding plane	10	2,076
Olive-green to olive-brown micaceous siltstone	10	2,086
Gray micaceous shale	10	2,096
Yellow to green shale	9	2,105

Continued

8/5-7F1.--Continued

Material	Thickness (feet)	Depth (feet)
Yellow to green shale, with micaceous siltstone	10	2,115
Green micaceous sand	15	2,130
Gray micaceous siltstone	10	2,140
Gray micaceous sand, gray to tan siltstone	10	2,150
White limy sand, gray-green siltstone, buff silty shale	60	2,210
Buff sandy siltstone and green silty shale with streak of sand	160	2,370
Quartz and feldspar sand, green shale, trace of gray limestone	30	2,400
Very hard quartzitic sand, streaks of sandy shale	139	2,539

8/5-14H1. Mrs. Turuo, formerly Adelanto Development Corp., well G2. Altitude about 2,680 feet. Drilled in 1955. 11-inch casing zero to 105 feet, uncased hole 105 to 2,085 feet, not perforated.

Sandy shale and streaks of clay	102	102
Sandy clay, streaks of hard clay	448	550
Sandy clay and boulders	660	1,210
Hard sand and volcanic rock	152	1,362
Hard sandy clay	188	1,550
Sandy boulders	102	1,652
Brown sandy clay and boulders (nonmarine sediments)	433	2,085

8/6-12B1. U. S. Government, formerly Adelanto Development Corp., well G1. Altitude about 2,705 feet. Drilled in 1954. 11-inch casing zero to 101 feet, uncased hole 101 to 4,122 feet, not perforated.

Sandy clay	101	101
Yellow sandy clay	80	181
Shale and hard shells	71	252
Brown shale	18	270
Sandy yellow clay	70	340
Sand and gravel	10	350
Hard clay and shells	75	425
Hard gray shale	65	490
Hard sticky brown shale	51	541
Gray shale	44	585
Conglomerate and streaks of gray shale	137	722
Gray shale, streaks of lime	31	753
Gray shale, streaks of brown shale	122	875
Blue-gray shale, streak of lime	37	912
Hard sandy gray shale	129	1,041
Blue-gray shale, streaks of sand	42	1,083
Very hard sandstone	5	1,088
Gray shale, streaks of hard green sand	72	1,160
Sand shale and boulders	97	1,257
Hard brown sandy shale	86	1,343
Hard gray shale, streaks of brown	110	1,453

Continued

8/6-12B1.--Continued

Material	Thickness (feet)	Depth (feet)
Blue sandy shale	76	1,529
Hard brown shale	82	1,611
Gray shale and hard sand (cored)	15	1,626
Hard gray shale	12	1,638
Hard brown and gray shale	112	1,750
Hard gray shale	23	1,773
Sticky gray shale	8	1,781
Gray sandy shale	88	1,869
Gray and brown shale	31	1,900
Hard sandy gray shale	43	1,943
Gray and brown shale	10	1,953
Hard brown shale	34	1,987
Hard shale and boulders	62	2,049
Brown shale, red and gray sand (cored)	20	2,069
Brown shale and sand	115	2,184
Brown and gray shale	55	2,239
Hard granite-like sand	36	2,275
Hard brown sand	35	2,310
Brown sandy shale	18	2,328
Brown sandy shale (cored)	16	2,344
Hard sandy brown shale	55	2,399
Very hard granite-like conglomerate	10	2,409
Hard gray granite-like conglomerate	34	2,443
Very hard brown shale	16	2,459
Granite	4	2,463
Granite and hard brown shale	82	2,545
Conglomerate (cored)	5	2,550
Hard brown shale and granite	117	2,667
Hard gray and brown shale	31	2,698
Hard brown shale with gray and green streaks	126	2,824
Conglomerate (cored)	13	2,837
Shale and granite	29	2,866
Shale, granite and fractures	29	2,895
Brown shale and hard sand	68	2,963
Conglomerate, shale, granite sand	76	3,039
Conglomerate, streaks of quartz	96	3,135
Gray shale, granite streaks	23	3,158
Conglomerate	63	3,221
Hard sand, gray shale, conglomerate	66	3,287
Conglomerate	32	3,319
Hard sandstone and boulders	23	3,342
Hard sand, gray shale	92	3,434
Conglomerate (cored)	17	3,451
Hard sandy shale	80	3,531
Fine sand, pebbles and silt	40	3,571
Hard sand	57	3,628
Hard sandy shale	81	3,709
Hard sand, streaks of "bentonite"	97	3,806
Hard sand	28	3,834
Hard green sandy shale	29	3,863
Sandy shale	23	3,886
Hard sand and granite streaks	26	3,912
Hard and tough brown shale	39	3,951
Granite	125	4,076
Granite conglomerate (cored 3 feet)	46	4,122

10/6-5E1. Darr and Caillier, formerly George Beecher. Altitude about 2,475 feet. Drilled in 1942. 8-inch casing, perforated 200 to 400 feet.

Material	Thickness (feet)	Depth (feet)
Topsoil	10	10
Gravel	5	15
Gravel in red clay	5	20
Red clay	10	30
Sandy shale	50	80
Hard shale	40	120
Sandy shale	70	190
Shale and sand	22	212
Water gravel	16	228
Water gravel and shale	6	234
Shale	10	244
Water gravel	6	250
Grayish shale	6	256
Shale	9	265
Broken shale and gravel	7	272
Water gravel	6	278
Shale with some gravel	32	310
Shale	90	400
Boulders	5	405
Shale	12	417
Gravel	13	430
Shale	20	450

10/6-5E5. California Electric Power Co. Altitude about 2,475 feet. 14-inch casing, perforated from 45 to 105 and 200 to 280 feet.

Undescribed	30	30
Rock, packed and gravel	90	120
Clay and sand	30	150
Gravel and clay	38	188
Gravel and sand, packed	42	230
Sand and gravel, water	33	263
Clay, yellow	22	285

10/6-5F1. Carl Siders. Altitude about 2,475 feet. Drilled by H. H. Ley in 1949. 10-inch casing, perforated from 210 to 234 feet.

Soil, sandy clay, and tough clay ribs	195	195
Coarse sand, yellow clay	3	198
Loose sand and gravel, rock	24	222
Conglomerate, yellow clay, rocks, lime	5	227
Cemented sand	1	228
Granite, semidecomposed	1	229
Red sandy clay	5	234
No data	153	387

10/6-20M1 (DFC-1). U. S. Air Force, test well. Altitude about 2,700 feet. Drilled by the Department of the Interior in 1955. Not cased.

Material	Thickness (feet)	Depth (feet)
Sand and silt composed of quartz feldspars and biotite. This unit probably consists of poorly consolidated silt, sand, friable cobbles and friable boulders	128	128
Well-consolidated sand and silt, containing hard pebbles, cobbles, and boulders of quartz monzonite	12	140
Conglomerate, well-consolidated, calcareous; composed of silt, sand, pebbles, cobbles and boulders	1,011	1,151
Sand, greenish-gray, slightly calcareous, subangular, very fine to very coarse; contains numerous granules and pebbles	11	1,162
Sand, greenish-gray, slightly calcareous, argillaceous, very fine to medium, cross-bedded	2	1,164
Sand, greenish-gray, slightly calcareous, very fine to very coarse; contains many granules	5	1,169
Sand, greenish-gray, slightly calcareous, very fine, crossbedded	.2	1,169.2
Sand, greenish-gray, slightly calcareous, very fine to very coarse; contains many granules	1.8	1,171
Sand, greenish-gray, calcareous, very well cemented, medium to very fine	2	1,173
Sand, greenish-gray to yellowish-gray, slightly calcareous, very fine to very coarse; contains many granules and some pebbles	8	1,181
Sand, yellowish-gray, slightly calcareous, very fine to very coarse; contains some granules. Bedding dips 7°	30	1,211
Sand, light greenish-gray, very fine to very coarse but predominantly fine. Some granules present	9	1,220
Sand, light greenish-gray, very fine to very coarse; contains numerous granules	6	1,226
Silt, greenish-gray, crossbedded. Bedding is horizontal	8	1,234
Clay, greenish-gray, well-indurated, horizontally laminar	2	1,236
Sand, greenish-gray, very fine to very coarse; contains some granules	2	1,238
Sand, greenish-gray, silty, very fine, crossbedded	4	1,242
Clay, greenish-gray, silty	1	1,243
Silt, greenish-gray, argillaceous, contains much very fine sand	3	1,246
Sand, greenish-gray, argillaceous, silty, very fine to very coarse, contains numerous granules and a few pebbles	2	1,248

Continued

10/6-20M1.--Continued

Material	Thickness (feet)	Depth (feet)
Silt, greenish-gray, argillaceous, horizontally bedded. A couple of bands of clay grade into argillaceous silt within this unit	3	1,251
Sand, very light gray, very fine to very coarse, contains some granules. This unit becomes finer grained with increasing depth	1	1,252
Silt, greenish-gray, argillaceous, horizontally thin bedded; contains some very fine sand	2	1,254
Sand, greenish-gray to very light gray, argillaceous, very fine with distorted bedding. A thin layer of fine to very coarse sand is present at 1,256 feet	2	1,256
Silt, greenish-gray, argillaceous, horizontally thin bedded; contains some very fine sand	2	1,258
Sand, greenish-gray, silty, very fine to fine	.5	1258.5
Silt and clay, greenish-gray, horizontally thin bedded, argillaceous silt and silty clay	9.5	1,268
Silt, greenish-gray, argillaceous, massive; contains some very fine sand	1	1,269
Sand, greenish-gray, slightly calcareous, very fine to coarse	2	1,271
Sand, greenish-gray, argillaceous	1	1,272
Sand, greenish-gray, slightly calcareous, very fine to very coarse; contains numerous granules. The sand becomes finer with increasing depth.	8	1,280
Silt, dark greenish-gray, argillaceous, arenaceous	2	1,282
Sand, greenish-gray, calcareous, very fine to very coarse; contains some granules	20	1,302
Sand, greenish-gray to yellowish-gray, calcareous, silty, very fine; contains a few layers of coarser sand and granules	7	1,309
Sand, yellowish-gray, slightly calcareous, well-cemented, very fine to coarse	3	1,312
Cobbles and pebbles, quartz monzonite. Poor core recovery	2	1,314
Sand, greenish-gray to yellowish-gray, very fine to coarse	22	1,336
Sand, greenish-gray, slightly calcareous, very fine to very coarse; contains numerous granules and a few pebbles	4	1,340
Silt, greenish-gray, slightly calcareous, argillaceous, crossbedded; contains some very fine sand. Bedding is horizontal	11	1,351
Sand, very light-gray calcareous, very fine to very coarse	1	1,352
Sand, greenish-gray, very fine to medium	2	1,354
Sand, greenish-gray, slightly calcareous, very fine to very coarse; contains numerous granules	2	1,356
Sand, greenish-gray, calcareous, very fine, thin bedded	3	1,359
Clay, greenish-gray, silty	2	1,361

Continued

10/6-20M1.--Continued

Material	Thickness (feet)	Depth (feet)
Silt, greenish-gray, slightly calcareous, argillaceous, arenaceous	2	1,363
Sand, greenish-gray, slightly calcareous, contains much very fine sand	.5	1,363.5
Silt, greenish-gray, slightly calcareous, contains much very fine sand	1	1,364.5
Sand, greenish-gray, very fine to medium	.5	1,365
Sand, greenish-gray, argillaceous, silty, very fine to medium; contains a few thin beds of silt	4	1,369
Sand, greenish-gray, calcareous, silty, very fine to very coarse	5	1,374
Sand, light olive-gray, slightly calcareous, very fine to very coarse; contains numerous granules and a few pebbles	11	1,385
Sand, light olive-gray, calcareous, silty, very fine	2	1,387
Sand, greenish-gray, calcareous, silty, very fine to very coarse; contains scattered granules and a few thin horizontal beds of silt	6	1,393
Sand, greenish-gray, calcareous, very fine to very coarse; contains numerous granules and a few pebbles	7	1,400
Sand, light olive-gray, calcareous, silty, very fine to very coarse, but predominantly fine and medium. A quartz monzonite cobble is present at 1,404 feet and a thin silt layer occurs at 1,415 ft	22	1,422
Sand, light olive-gray, slightly calcareous, very fine to very coarse; contains some granules and a few pebbles	9	1,431
Sand, greenish-gray, calcareous, silty, very fine	5	1,436
Sand, light olive-gray, very fine to very coarse; contains numerous granules and some pebbles	1	1,437
Sand, greenish-gray, calcareous, silty, very fine to medium, alternating massive and thin beds	26	1,463
Sand, greenish-gray, calcareous, silty, very fine to medium, alternating massive and thin beds	20	1,483
Sand, greenish-gray, calcareous, very fine to very coarse; contains numerous granules and a few pebbles. A quartz monzonite cobble is present at 1,483 feet	15	1,498
Sand; same as that at 1,483 feet	15	1,513
Sand, greenish-gray to light olive-gray, calcareous, very fine to very coarse, but predominantly fine and medium. A couple of quartz monzonite pebbles are present at 1,525 feet	20	1,533
Sand, greenish-gray to light olive-gray, slightly calcareous, silty, very fine to very coarse; contains numerous granules and some pebbles	28	1,561

10/6-20M2 (SFC-1). U. S. Air Force. Altitude about 2,700 feet. Not perforated. Test well for borate minerals.

Material	Thickness (feet)	Depth (feet)
Sand and gravel	128	128
Conglomerate, gray, with cobbles and pebbles of granitic rocks in matrix of gray arkosic sand	1,023	1,151
Sand, fine to coarse, gray, arkosic, locally pebbly, with some parting of clay; dips zero to 5°	1,424	2,575
Sand, as above, with some interbedded clay and siltstone, greenish clay. Bedding horizontal	310	2,885
Sand and sandstone, fine to medium; gray, arkosic, with clay; dips zero to 10°	531	3,416
Sandstone, gray friable, medium to coarse grained, with some conglomerate of granitic pebbles and cobbles	84	3,500

11/6-31-1. G. K. Hogan and J. DeFon. Altitude about 2,450 feet. Drilled by H. H. Ley in 1946. Well destroyed.

"Hardpan"	43	43
Soil, sandy clay	28	71
Sand, approximately 60 percent; clay, approximately 40 percent	2	73
Fine sand and clay	27	100
Clay containing approximately 5 percent coarse sand	3	103
"Hard rib"	2	105
Sandy clay	19	124
"Hard rib"	1	125
Clay and fine sand	22	147
Sandy clay	43	190
Fine water sand, small amount of water	2	192
Sandy clay	8	200
Coarse sand and clay	4	204
Sandy clay	16	220

Table 7.--Chemical analyses of waters from wells

Constituents: The sum of determined constituents is the sum of the tabulated constituents minus approximately half (50.8 percent) of the bicarbonate. Because all of the commonly occurring major constituents (except silica in many of the analyses) were analytically determined, the values for dissolved solids and sum of determined constituents should be approximately the same. All values have been rounded where necessary to conform to the standards of the Geological Survey. Numbers in parentheses are values calculated by the Geological Survey, Ground Water Branch.

Analyzing laboratory: Bc Babcock and Sons, Riverside, Calif.; DA U. S. Department of Agriculture, Rubidoux Laboratory, Riverside, Calif.; DWR State of California, Department of Water Resources, GS U. S. Geological Survey (Thompson, 1929), F San Bernardino County Flood Control District.

Well number	6/4-19F1	6/4-19J2	6/4-19P1
Constituents in parts per million			
Silica (SiO_2)	20		
Iron (Fe)	1.2		0.8
Calcium (Ca)	60	44	30
Magnesium (Mg)	12	10	8
Sodium (Na)	a48	46	94
Potassium (K)		1.7	
Bicarbonate (HCO_3)	174	205	183
Carbonate (CO_3)	0	0	0
Sulfate (SO_4)	107	38	100
Chloride (Cl)	36	32	36
Fluoride (F)		.7	
Nitrate (NO_3)		0	0
Boron (B)		0	
Dissolved solids (Dis. S)		298	
Sum of determined constituents	(370)	(273)	(359)
Hardness as $CaCO_3$	(199)	150	108
Percent sodium (%Na)	34	39	2
Specific conductance (micromhos at 77°F)	619	506	572
pH		7.2	7.3
Temperature (°F)			
Date collected (Date)	8-30-54		6-20-56
Depth of well in feet (Depth)	100	70	100
Analyzing laboratory and number (Lab., No.)	Bc-540820A	F-2548	Bc-560621C

a. Includes potassium.

Well number	6/4-19R3	6/4-19R4		6/4-24J1	6/4-26B1
Constituents in parts per million					
Fe				0	0
Ca	40	31	68	55	41
Mg	7.6	9.6	11	9	10
Na	a32	(a39)	59	60	84
K			1.6	.8	1.6
HCO_3	159	172	177	142	95
CO_3	0	0	0	0	0
SO_4	18	27	88	127	167
Cl	36	22	80	26	42
F	.6		.7	2.4	3.2
NO_3	.5		7.9		9.5
B	.05		.17		.40
Dis. S	263		444	417	442
Sum	(213)	(214)	(403)	(350)	(406)
Hardness	131	114	(215)	174	143
%Na	35	(42)	37	43	56
Micromhos	370		685	618	695
pH	8.2	7.3	7.2	7.8	7.7
Date	4-15-52	4-8-42	8-7-57	9-2-55	9-2-55
Depth	55	48		190	
Lab., No.	F-2147	F-10A	GS-R1651	F-3661	F-3660

Well number	6/4-29M4			6/4-29M6	6/4-29M7
Fe				0.1	1.0
Ca	22	20	30	45	36
Mg	7.9	13	11	12	11
Na	(a32)	(a28)	a32	a37	a90
HCO_3	130	140	133	180	183
CO_3	0	0	0	0	Trace
SO_4	23	23	20	45	130
Cl	19	18	18	32	21
NO_3			22	0	0
B			.13		
Sum	(168)	(171)	(199)	(260)	(379)
Hardness	89	105	118	160	136
%Na	(44)	(36)	(37)	33	59
Micromhos		319	325	452	589
pH	7.6	7.6	7.2	7.6	7.1
Date	4-8-42	6-29-42	9-21-52	6-20-56	6-20-56
Depth				74	53
Lab., No.	F-9A	F-9B	F-9C	Bc-560621D	Bc-560621B

a. Includes potassium.

Well number	6/4-30C1			6/4-30D2	6/4-30D4
Constituents in parts per million					
Ca	33	41	24	31	25
Mg	9.7	6.9	3.9	7.0	6
Na	(a75)	(a80)	a62	57	50
K				1.4	1.5
HCO_3	155	168	106	94	144
CO_3	0	0	0	0	9
SO_4	132	133	97	126	39
Cl	21	20	9	13	23
F				.5	.6
NO_3			11	4.5	1.5
B			.06	0	.02
Dis. S				298	244
Sum	(347)	(364)	(259)	(286)	(227)
Hardness	123	130	76	104	87
%Na	(55)	(57)	(64)	54	55
Micromhos		606	441	487	344
pH	7.3	7.0	7.2	6.8	8.4
Date	4-8-42	6-29-42	9-21-42	4-3-57	6-19-52
Depth	50			40	30
Lab., No.	F-30A	F-30B	F-30C	F-4068	F-3206

Well number	6/4-30G1	6/4-30K1	6/4-30K2	6/4-30P2	6/4-32D8
SiO_2	17	17	17		
Fe	0	.01	.32		
Ca	31	33	24	29	13
Mg	4.8	6.7	5.4	8	4
Na	51	45	56	47	29
K	1.9	1.8	1.9	2.9	1.2
HCO_3	167	177	171	171	107
CO_3	0	0		5	6
SO_4	41	33	44	33	6
Cl	20	22	14	19	9
F	.8	.8	.8	.6	.5
NO_3	.2	.4	2	4	4
B	.14	.13	.05	0	0
Dis.S	250	247	249	251	145
Sum	(250)	(247)	(250)	(232)	(126)
Hardness	97	110	82	103	51
%Na	53	47	59	48	55
Micromhos	400	395	397	396	209
pH	7.0	7.3	7.0	8.1	8.5
°F	58		58		
Date	5-17-56	5-17-56	5-17-56	4-1-54	7-23-55
Depth	100	105	98	43.8	73
Lab., No.	GS-19210	GS-19209	GS-19211	F-3087	F-3618

a. Includes potassium.

Well number	6/4-32G3				
Constituents in parts per million					
SiO_2		25	20	22	
Fe		0			
Ca	28	28	36	27	24
Mg	7	7	10	10	2
Na	33	36	43	41	37
K	2.2	2.1	2.1	2.3	1.2
HCO_3	134	146	166	146	128
CO_3	0	0	0	0	0
SO_4	14	11	17	20	7
Cl	18	18	33	33	16
F	.4	.4	.4	.4	.3
NO_3	27	23	31	21	16
B	.02	.04	.06	.06	.02
Dis. S	180	210	265	228	183
Sum	(196)	(223)	(275)	(249)	(167)
Hardness	99	(99)	(131)	(109)	(68)
%Na	42	(44)	(41)	(44)	54
Micromhos	320	354	441	375	293
pH	7.7	7.8	7.6	7.8	7.9
Date	11-9-54	5-5-55	5-3-56	12-20-56	7-11-57
Lab., No.	DWR-5006	DWR-5701	DWR-6973	DWR-T5482	DWR-R1648

Well number	6/4-32G4		6/4-33R1	6/4-34M2	6/4-34M3
Fe			0	0	0
Ca	12	30	70	56	57
Mg	3.2	8	17	12	13
Na	(a30)	37	50	46	184
K		2.8	1.0	1.0	2.0
HCO_3	110	159	193	122	356
CO_3	0	0	0	0	5
SO_4	3.5	16	101	100	175
Cl	10	19	57	60	77
F		.4	.8	.8	.8
NO_3		31	2.5	0	.5
B		0	.12	.08	.54
Dis.S		231	415	361	709
Sum	(113)	(222)	(394)	(336)	(690)
Hardness	42	105	242	189	196
%Na	60	42	31	34	67
Micromhos		369	704	608	1,170
pH	8.1	8.1	7.2	8.0	8.1
Date	4-8-42	4-1-54	9-2-55	9-2-55	9-2-55
Depth			262	60	
Lab., No.	F-6A	F-3081	F-3674	F-3668	F-3675

a. Includes potassium.

Well number	6/4-34M4	6/4-34M5	6/4-34M6	6/4-34N2	6/4-34N3
Constituents in parts per million					
Fe		0		0	0
Ca	156	156	162	58	38
Mg	31	31	33	14	10
Na	92	86	72	42	28
K	1.6	1.7	2.0	.8	1.0
HCO_3	322	327	276	161	110
CO_3	0	0	0	0	0
SO_4	257	246	249	94	57
Cl	122	118	135	44	31
F	.6	.8	.6	.8	.6
NO_3	1.5	2.0	0	.5	2.5
B	0	.26	.03	.1	.08
Dis. S	906	868	983	366	265
Sum	(821)	(803)	(790)	(333)	(222)
Hardness	515	517	541	205	134
%Na	27	27	22	31	31
Micromhos	1,350	1,330	1,340	591	402
pH	7.0	7.2	6.9	7.7	7.4
Date	9-2-55	9-2-55	9-2-55	9-2-55	9-2-55
Depth	50	50	52		82
Lab., No.	F-3664	F-3669	F-3665	F-3670	F-3658

Well number	6/4-34N4	6/4-34N6	6/4-34N7	6/4-34P1	6/4-34P2
Fe	0	0	0	0	0
Ca	62	78	80	40	105
Mg	14	18	20	8	25
Na	34	110	126	56	98
K	1.7	2.7	2.4	1.5	2.0
HCO_3	154	300	232	149	246
CO_3	0	0	0	0	0
SO_4	93	149	199	63	232
Cl	47	79	114	45	95
F	.3	.6	.6	1.0	.6
NO_3	3.0	1.0	3.5	4.0	0
B	0	.34	.2	.1	.08
Dis. S	376	633	697	304	738
Sum	(331)	(587)	(660)	(292)	(679)
Hardness	216	271	284	130	365
%Na	25	47	49	48	37
Micromhos	591	1,020	1,140	521	1,130
pH	7.3	7.3	7.8	7.5	6.9
Date	9-2-55	9-2-55	9-2-55	9-2-55	9-2-55
Depth	100		50	108.9	86
Lab., No.	F-3656	F-3657	F-3679	F-3680	F-3681

Well number	6/5-8F1			6/5-28F2		
Constituents in parts per million						
SiO_2				34	10	
Fe					.3	
Ca	5.2	14	8	13	84	104
Mg	3.6	1.6	3	3.6	24	27
Na	a84	85	85	78	a124	125
K		.8	1.6	5.9		4.9
HCO_3	123	128	85		181	244
CO_3	0	0	22		0	0
SO_4	101	108	107	130	257	259
Cl	4.5	8.5	2	85	90	97
F		.5			0	.4
NO_3		2.5	1.5	37	45	73
B			.08	.06	.1	.2
Dis. S		300	298		751	866
Sum	(259)	(284)	(272)	(387)	(723)	(810)
Hardness	28	(42)	30	(47)	308	372
%Na	(87)	(84)	(84)	(75)	(47)	42
Micromhos	451	467	443		1,120	126
pH	8.2	7.4	8.6		7.8	7.8
Date	9-21-42	3-12-54	4-1-54	11-15-32	1-9-50	4-1-54
Depth	90			190		
Lab., No.	F-29A	GS-P476	F-3089	DA-6910	F-1221	F-3088

Well number	6/5-28F3			6/5-29H1		
SiO_2			10		14	
Fe					.5	
Ca	(11)	4.4	20	19	8.8	8
Mg	4.0	3.2	1.1	8.5	4.7	1
Na	(79)	a85	a75	a87	a81	80
K						2.0
HCO_3	90	87	102	103	93	88
CO_3	0	0	0	0	1.2	0
SO_4	127	123	120	94	119	126
Cl	7.3	10	12	40	11	3
F					0	.5
NO_3		9.2	10	3.2	0	.5
B				0	.04	0
Dis. S		181	258	324	281	283
Sum	(272)	(278)	(298)	(303)	(286)	(264)
Hardness	45	24	55	83	41	24
%Na	(80)	(88)	(75)	(70)	81	87
Micromhos		478	483	536	461	427
pH	8.6	8.1	7.6	8.3	8.0	8.2
Date	4-8-42	2-15-43	3-9-44	8-19-43	1-9-50	4-1-54
Depth	136.1			190		
Lab., No.	F-2C	F-36	F-131	F-41	F-1222	F-3085

a. Includes potassium.

Well number	6/5-29J1		7/4-6A1	7/4-6H2	7/4-6J2	
Constituents in parts per million						
SiO_2				8	19	
Fe				1.0	0	
Ca	14	8	21	75	82	128
Mg	9.8	1	3.1	15	11	24
Na	5.9	80	113	a190	a78	140
K	1.5	2	2.9			2.9
HCO_3	146	72	203	415	285	417
CO_3	0		0	0	0	0
SO_4	50	126	82	192	109	211
Cl	19	3	43	59	70	113
F	.5	.5	1.6		0	.6
NO_3	3	.1	0	17	5.7	15
B	.16		.43	.06	.15	.6
Dis. S	230	283	383	696	542	861
Sum	(176)	(256)	(367)	(761)	(515)	(840)
Hardness	76	24	64	250	252	417
%Na	63	(87)	78	(62)	40	42
Micromhos	396		615	1,171	725	1,340
pH	7.9	8.2	8.0	6.7	7.8	7.4
Date	6-2-53	4-1-57	1-21-54	6-24-45	1-9-50	1-21-54
Depth	190				79	
Lab., No.	F-2675	F	F-2975	F-319	F-1224	F-2964

Well number	7/4-6P1		
SiO_2	22	2.8	0.8
Fe	.1	9.2	.48
Ca	59	59	58
Mg	16	19	12
Na	a82	a73	a71
HCO_3	240	224	217
CO_3	0	0	0
SO_4	129	132	133
Cl	38	46	46
F	.1	.4	.5
NO_3	.2	4.7	3.1
B	.5	.21	.21
Dis. S	444	493	483
Sum	(465)	(456)	(432)
Hardness	212	226	194
%Na	46	41	44
Micromhos	715	734	720
pH	6.8	7.4	6.8
Date	10-14-48	12-27-49	12-27-49
Depth	80		
Lab., No.	F-920	F-1214	F-1215

a. Includes potassium.

Well number	7/4-7C1					
Constituents in parts per million						
SiO_2	8				25	
Fe	.3	.05			0	
Ca	70	68	132	76	74	51
Mg	13	15	27	15	14	3
Na	139	103	118	66	68	44
K			4.1	2.2	2.0	2.5
HCO_3	376	320	288	259	229	220
CO_3	0	0	0	0	0	0
SO_4	122	143	362	129	135	33
Cl	41	55	59	41	40	21
F			.8	.7	.7	.5
NO_3	18	5.7	.5	1.0	1.0	3.0
B		.15	.35	.18	.14	.13
Dis. S	543	592	900	445	460	299
Sum	(596)	(548)	(846)	(459)	(473)	(266)
Hardness	227	231	443	(252)	(242)	(140)
%Na	(57)	(49)	36	36	(38)	40
Micromhos	922	901	1,280	758	741	492
pH	6.6	7.3	7.2	7.4	7.1	7.7
°F				62	59	
Date	6-24-45	12-27-49	1-21-54	10-28-54	5-5-55	7-10-57
Lab., No.	F-320	F-1213	F-2962	GS-5020	GS-5689	DWR-R1653

Well number	7/4-7C3		7/4-7K1	7/4-31E1		
SiO_2	10		24		25	
Fe	.2		0	0	0	
Ca	50	40	120	107	93	
Mg	9.9	11	20	16	10	
Na	a69	45	a162	66	53	
K		1.8		2.2	1.8	
HCO_3	229	178	390	307	290	214
CO_3	0	0	0	0	0	0
SO_4	56	54	216	141	84	
Cl	28	31	123	59	43	39
F		.7	1.0	.6	.8	
NO_3	33	0	10	3.0	0	
B	.06	.16	.44	.14	.1	
Dis. S	324	258	913	540	450	
Sum	(369)	(272)	(868)	(546)	(454)	(144)
Hardness	166	145	381	334	(273)	173
%Na	(48)	40	48	30	(30)	
Micromhos	559	462	1,250	833	678	612
pH	6.6	7.5	7.1	7.4	7.3	7.5
°F				70	68	63
Date	6-24-45	1-21-54	2-27-52	11-9-54	5-5-55	7-21-57
Depth	100		210	90		
Lab., No.	F-321	F-2963	F-2010	DWR-5011	DWR-5698	DWR-R1614

a. Includes potassium.

Well number	7/4-31M1		7/4-31P1		7/5-36Q1	
Constituents in parts per million						
SiO_2	13	17				
Ca	54	60	96	95	34	40
Mg	10	11	20	16	7.1	9.8
Na	63	66	50	54	a33	32
K	2.3	2.3	1.8	2.5		2
HCO_3	220	254	312	303	144	198
CO_3	0	0	0	0	0	0
SO_4	52	69	104	111	40	23
Cl	55	50	42	47	26	23
F	.7	1.5	.5	.6	.6	.6
NO_3	0	0	0	.5	0	0
B	.02	.05	.11	.14	.09	.01
Dis. S	384	478	493	493	243	255
Sum	(358)	(401)	(468)	(476)	(212)	(228)
Hardness	176	(195)	320	302	114	140
%Na	(43)	(42)	25	28	39	33
Micromhos	570	686	797	791	340	416
pH	8.0	7.6	7.2	7.5	7.7	7.2
Date	1-14-57	7-10-57		1-21-54	4-11-52	1-23-53
Depth	44.4		131		65	
Lab., No.	DWR-T5700	DWR-T929	F-2453	F-2961	F-2074	F-2483

Well number	8/4-17Q2	8/4-19J3			8/4-19R1	
SiO_2		28				
Fe		0				
Ca	52	94	135	208	99	115
Mg	7.9	12	28	30	18	17
Na	250	a148	175	210	164	170
K	2.5		4.7	4.9	3.1	4.1
HCO_3	298	289	281	254	290	285
CO_3	0	0	0	0	0	0
SO_4	221	169	286	369	228	321
Cl	141	134	220	377	119	126
F	.8	.5	.6	.4	.8	.6
NO_3	4.5	7.4	10	13	2.0	6.0
B	.64	.41	.51	.71	.29	.67
Dis. S	836	759	1,050	1,480	800	954
Sum	(827)	(735)	(998)	(1,340)	(777)	(900)
Hardness	162	284	454	645	320	368
%Na	77	53	45	41	52	51
Micromhos	1,310	1,240	1,650	2,140	1,120	1,490
pH	8.0	7.3	7.4	7.6	7.6	7.6
Date	6-2-53	2-5-52	1-21-54	2-4-54	6-24-52	1-21-54
Depth		40			30.0	
Lab., No.	F-2701	F-1990	F-2971	F-3008	F-2199	F-2970

a. Includes potassium.

Well number	8/4-20A1		8/4-20B1	8/4-20G2	
Constituents in parts per million					
SiO_2	17	21			
Ca	142	136	90	122	107
Mg	24	28	11	22	17
Na	286	320	190	135	190
K	3.1	4.2	2.6	3.7	5.3
HCO_3	374	390	267	297	300
CO_3	0	0	11	0	0
SO_4	338	381	207	202	232
Cl	300	335	169	159	193
F	1.2	2.4	.6	.7	.6
NO_3	3.5	4.5	3.0	4.5	4
B	.36	.65	.62	.47	.52
Dis. S	1,340	1,580	871	870	924
Sum	(1,300)	(1,430)	(817)	(795)	(897)
Hardness	(453)	455	42	289	338
%Na	(58)	(60)	60	42	54
Micromhos	2,030	2,310	1,230	1,350	1,490
pH	7.5	7.4	8.0	7.6	7.6
Date	1-14-57	7-10-57	10-10-55	3-9-53	1-21-54
Depth	25		40	60	
Lab., No.	DWR-T5701	DWR-T920	F-3759	F-2554	F-2974

Well number	8/4-20N1		8/4-20N2	8/4-20P1	8/4-20P2	8/4-20P3
Ca	270	339	159	631	84	422
Mg	42	54	23	90	18	39
Na	235	230	125	400	93	180
K	4.8	5.2	3.1	7.6	3.0	5.6
HCO_3	398	481	266	242	124	195
CO_3	0	0	0	0	0	0
SO_4	453	609	251	1,170	163	338
Cl	355	395	189	975	158	772
F	.7	.8	.7	.6	.6	.3
NO_3	23	7.0	10	4.5	2.5	16
B	.38	.60	.28	.34	.22	.23
Dis. S	1,710	2,090	951	3,900	681	3,110
Sum	(1,580)	(1,880)	(892)	(3,400)	(583)	(1,870)
Hardness	846	1,070	493	1,950	282	1,210
%Na	37	32	35	31	42	24
Micromhos	2,030	2,820	1,360	4,330	1,050	3,080
pH	7.4	7.9	7.5	7.9	7.9	8.1
Date	8-25-54	12-9-55	8-25-54	6-29-54	6-27-55	3-3-54
Depth	50		91	65	115	
Lab., No.	F-3240	F-3736	F-3239	F-3197	F-3615	F-3070

Well number	8/4-21F1	8/4-21F2		8/4-29C2	8/4-30E1	8/4-30F1
Constituents in parts per million						
SiO_2	30					
Fe	0					
Ca	58	40	70	169	56	233
Mg	7	12	14	27	4	9.2
Na	113	105	115	205	180	460
K	2.5	2.2	2.5	4.5	2.8	5
HCO_3	232	224	246	268	150	100
CO_3	0	0	0	0	5	0
SO_4	122	126	164	360	183	430
Cl	67	37	76	265	170	801
F	1	1.2	.9	.9	.6	.8
NO_3	0	1	1	8.9	1.5	22
B	.24	.19	.24	.38	.44	.01
Dis. S	515	473	555	1,250	731	2,200
Sum	(515)	(435)	(565)	(1,180)	(677)	(2,010)
Hardness	(173)	(149)	(232)	535	155	619
%Na	(58)	(60)	(52)	45	71	62
Micromhos	743	779	862	1,870	1,200	3,320
pH	7.7	8.1	7.5	7.5	8.2	7.8
°F	71		72			
Date	5-5-55	5-4-53	11-9-54	7-10-53	11-30-55	7-18-52
Depth	180	50			405	364
Lab., No.	DWR-5682	F-2663	DWR-5009	F-2738	F-3756	F-2290

Well number	8/4-30G1	8/4-30H1	8/4-30N2	8/4-30Q1	
SiO_2				26	
Fe				0	
Ca	78	116	183	92	164
Mg	8	17	11	21	32
Na	168	180	5.0	174	150
K	3.0	3.2	5.9		4.3
HCO_3	188	254	102	296	181
CO_3	0	3	0	0	0
SO_4	269	330	443	239	614
Cl	119	140	729	63	63
F	.9	.8	.9	.9	.8
NO_3	2.0	1.5	3.0	1.5	0
B	.60	.48	.57	.19	.08
Dis. S	788	976	1,970	752	1,230
Sum	(742)	(917)	(1,430)	(764)	(1,120)
Hardness	228	360	495	316	539
%Na	61	52	68	47	37
Micromhos	1,110	1,370	3,180	1160	1,640
pH	7.8	8.0	7.7	7.1	7.0
Date	11-30-55	11-30-55		2-5-52	1-21-54
Depth	212	55	59.5		
Lab., No.	F-8755	F-3757	F-2547	F-1987	F-2967

Well number	8/4-31D1		8/4-31J1	
Constituents in parts per million				
SiO_2	30			
Fe	0			
Ca	34	180	67	69
Mg	8.5	46	6.7	12
Na	a129	275	130	95
K		5.3	2.9	2.8
HCO_3	221	193	288	224
CO_3	0	0	0	0
SO_4	113	350	136	127
Cl	61	494	61	85
F	.3	.2	.9	.8
NO_3	4.5	9.9	1.7	2.0
B	.36	.48	.26	.26
Dis. S	500	1,540	580	516
Sum	(490)	(1,460)	(549)	(504)
Hardness	120	637	195	220
%Na	70	48	59	48
Micromhos	820	2,480	806	852
pH	8.1	7.6	8.0	7.6
Date	2-5-52	1-21-54	7-7-52	1-21-54
Depth			60	
Lab., No.	F-1988	F-2968	F-2222	F-2966

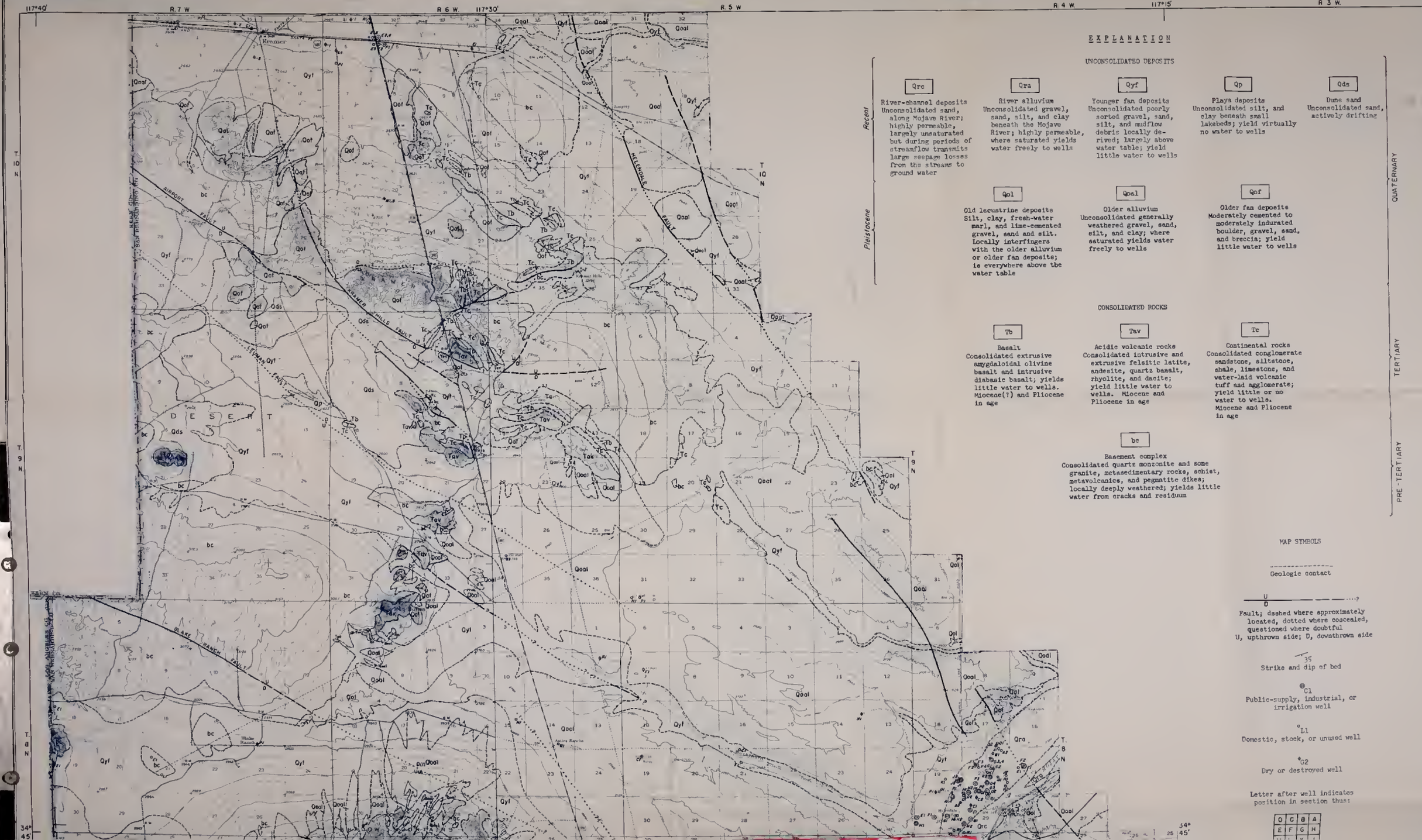
Well number	8/4-31R1				
SiO_2	22		30	30	
Fe	0		0		
Ca	46	58	134	159	251
Mg	5.8	12	17	27	33
Na	a131	118	115	123	215
K		2.7	3.0	3.0	2.5
HCO_3	205	224	325	376	458
CO_3	0	0	0		0
SO_4	120	148	203	240	444
Cl	81	85	113	135	278
F	1.5	2.4	1.0	.8	.5
NO_3	9.4	2.5	6.4	11	13
B	.58	.67	.36	.34	.57
Dis. S	539	596	780	922	1,560
Sum	(518)	(539)	(783)	(914)	(1,470)
Hardness	138	192	(405)	(508)	(762)
%Na	68	57	(38)	(34)	38
Micromhos	890	904	1,200	1,430	2,240
pH	7.6	7.7	7.8	7.5	7.3
°F			71		
Date	2-5-52	1-21-54	5-5-55	5-3-56	7-10-57
Depth	60				
Lab., No.	F-1986	F-2965	DWR-5699	DWR-6934	DWR-R1647

a. Includes potassium.

Well number	8/4-32M1		8/4-32M4	8/4-32N2	8/5-21F1
Constituents in parts per million					
SiO_2			25	b35	
Ca	197	218	85	31	45
Mg	27	28	10	4.9	9
Na	140	172	a132	a73	214
K	4.0	4.5			2.5
HCO_3	386	422	273	215	205
CO_3	0	0	7	0	0
SO_4	360	119	192	31	242
Cl	172	188	83	32	121
F	.9	.9	.9		
NO_3	2.0	2.5	.5		32
B	.44	.50	.20		.6
Dis. S	1,170	1,360	691	313	796
Sum	(1,100)	(941)	(670)	(313)	(767)
Hardness	600	653	256	98	(149)
%Na	34	36	53	62	(75)
Micromhos	1,710	1,870	960		1,270
pH	7.6	7.3	8.2		7.4
Date	10-3-56	2-7-57	3-4-52	7-21-08	3-12-54
Depth				10	228
Lab., No.	F-3980	F-4051	F-2028	GS-DGT103	DWR-P483

Well number	8/5-25R1		9/6-34B1	10/6-5E3		10/6-5E5
SiO_2	22		5	57		20
Fe	0					3.0
Ca	51	97	22	43	44	41
Mg	2.2	6.1	6	13	11	17
Na	202	260	315	426	430	a379
K		5.2	6	3.0	4.5	
HCO_3	156	137	138	304	302	293
CO_3	0	0		11	0	13
SO_4	199	281	311	318	321	302
Cl	150	302	244	335	333	287
F	.1	.7	6.4	1.6	1.0	
NO_3	2.0	5.0	1	20	20	
B	.28	.67	1	2.9	2.6	0
Dis. S	708	1,050		1,360	1,300	1,360
Sum	(706)	(1,030)	(1,020)	1,380	1,320	1,210
Hardness	136	268	(80)		153	175
%Na	77	67	(89)	85	85	83
Micromhos	1,190	1,750	1,600	2,120	2,160	
pH	7.6	7.8	8.0	7.8	7.8	
Date	2-5-52	1-21-54	5-14-53	4-17-53	6-5-53	
Depth	140		300	440		258.8
Lab., No.	F-1989	F-2969	GS	GS	DWR-3108	

a. Includes potassium.
b. Includes iron and aluminum oxides and silica.



EXPLANATION

UNCONSOLIDATED DEPOSITS

Recent / Pleistocene — QUATERNARY

Qrc — River-channel deposits
Unconsolidated sand, along Mojave River; highly permeable, largely unsaturated but during periods of streamflow transmits large seepage losses from the streams to ground water

Qra — River alluvium
Unconsolidated gravel, sand, silt, and clay beneath the Mojave River; highly permeable, where saturated yields water freely to wells

Qyf — Younger fan deposits
Unconsolidated poorly sorted gravel, sand, silt, and mudflow debris locally derived; largely above water table; yield little water to wells

Qp — Playa deposits
Unconsolidated silt, and clay beneath small lakebeds; yield virtually no water to wells

Qds — Dune sand
Unconsolidated sand, actively drifting

Qol — Old lacustrine deposits
Silt, clay, fresh-water marl, and lime-cemented gravel, sand and silt. Locally interfingers with the older alluvium or older fan deposits; is everywhere above the water table

Qoal — Older alluvium
Unconsolidated generally weathered gravel, sand, silt, and clay; where saturated yields water freely to wells

Qof — Older fan deposits
Moderately cemented to moderately indurated boulder, gravel, sand, and breccia; yield little water to wells

CONSOLIDATED ROCKS

Pleistocene — QUATERNARY

Tb — Basalt
Consolidated extrusive amygdaloidal olivine basalt and intrusive diabasic basalt; yields little water to wells. Miocene(?) and Pliocene in age

Tav — Acidic volcanic rocks
Consolidated intrusive and extrusive felsitic latite, andesite, quartz basalt, rhyolite, and dacite; yield little water to wells. Miocene and Pliocene in age

Tc — Continental rocks
Consolidated conglomerate sandstone, siltstone, shale, limestone, and water-laid volcanic tuff and agglomerate; yield little or no water to wells. Miocene and Pliocene in age

TERTIARY

bc — Basement complex
Consolidated quartz monzonite and some granite, metasedimentary rocks, schist, metavolcanics, and pegmatite dikes; locally deeply weathered; yields little water from cracks and residuum

PRE-TERTIARY

MAP SYMBOLS

Geologic contact

U / D — Fault; dashed where approximately located, dotted where concealed, questioned where doubtful
U, upthrown side; D, downthrown side

35 — Strike and dip of bed

C1 — Public-supply, industrial, or irrigation well

L1 — Domestic, stock, or unused well

G2 — Dry or destroyed well

Letter after well indicates position in section thus:

D	C	B	A
E	F	G	H
L	K	J	


INDEX TO TOPOGRAPHIC QUADRANGLE MAPS
KRAMER 1942
HAWES 1956
BARSTOW 1953
SHADOW MOUNTAINS 1942
VICTORVILLE 1956
APPLE VALLEY 1957
LOCATION MAP
CALIFORNIA
KERN COUNTY
SAN BERNARDINO COUNTY
Q C B A
E F G H
M L K J
N P Q R
A dash and number instead of a letter and number indicate the well was plotted from an unverified location description
For a complete description of well-numbering system see text
STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
FEDERAL-STATE COOPERATIVE GROUND WATER INVESTIGATIONS
PREPARED BY
U S GEOLOGICAL SURVEY
MAP OF THE WEST PART OF THE MIDDLE MOJAVE VALLEY AREA, CALIFORNIA
SHOWING RECONNAISSANCE GEOLOGY AND LOCATIONS OF WELLS
CONTOUR INTERVAL 20, 25, AND 40 FEET
Base from U S Geological Survey topographic maps, scale 1:62,500, 1959
Locations of wells by R W Page, W R Mayle, Jr. and others Geology by R W Page and W R Mayle, Jr., in large part generalized from unpublished mapping by T W Dibblee, Jr. and L. C. Dutcher, and published mapping in the Barstow quadrangle by D. E. Bowen, Jr., (1954), 1959